Appendix A

ADISS Reports

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

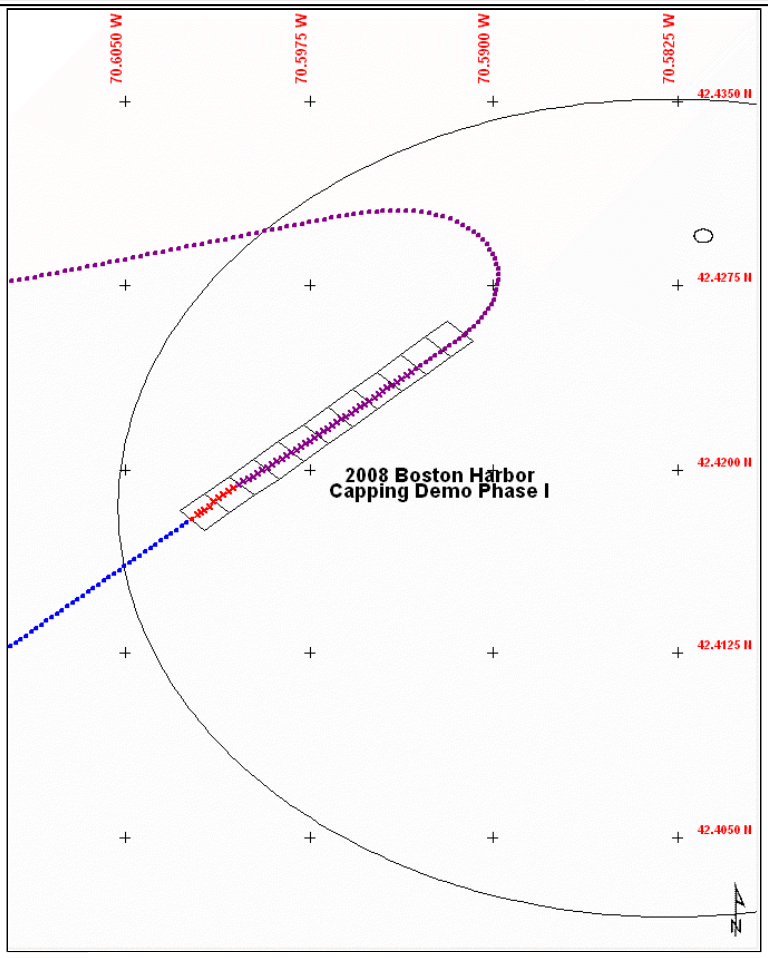
Trip #:	58
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/11/2008 16:04:05
Init Aft Draft:	19.81 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/11/2008 19:42:49	**Time:**	6/11/2008 19:43:40
Lat:	42.417958	**Lat:**	42.419234
Long:	-70.602306	**Long:**	-70.600611
Aft Draft:	18.48 ft	**Aft Draft:**	4.16 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/11/2008 4:04:05 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061308_085412

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W912WJ-07-C-0023

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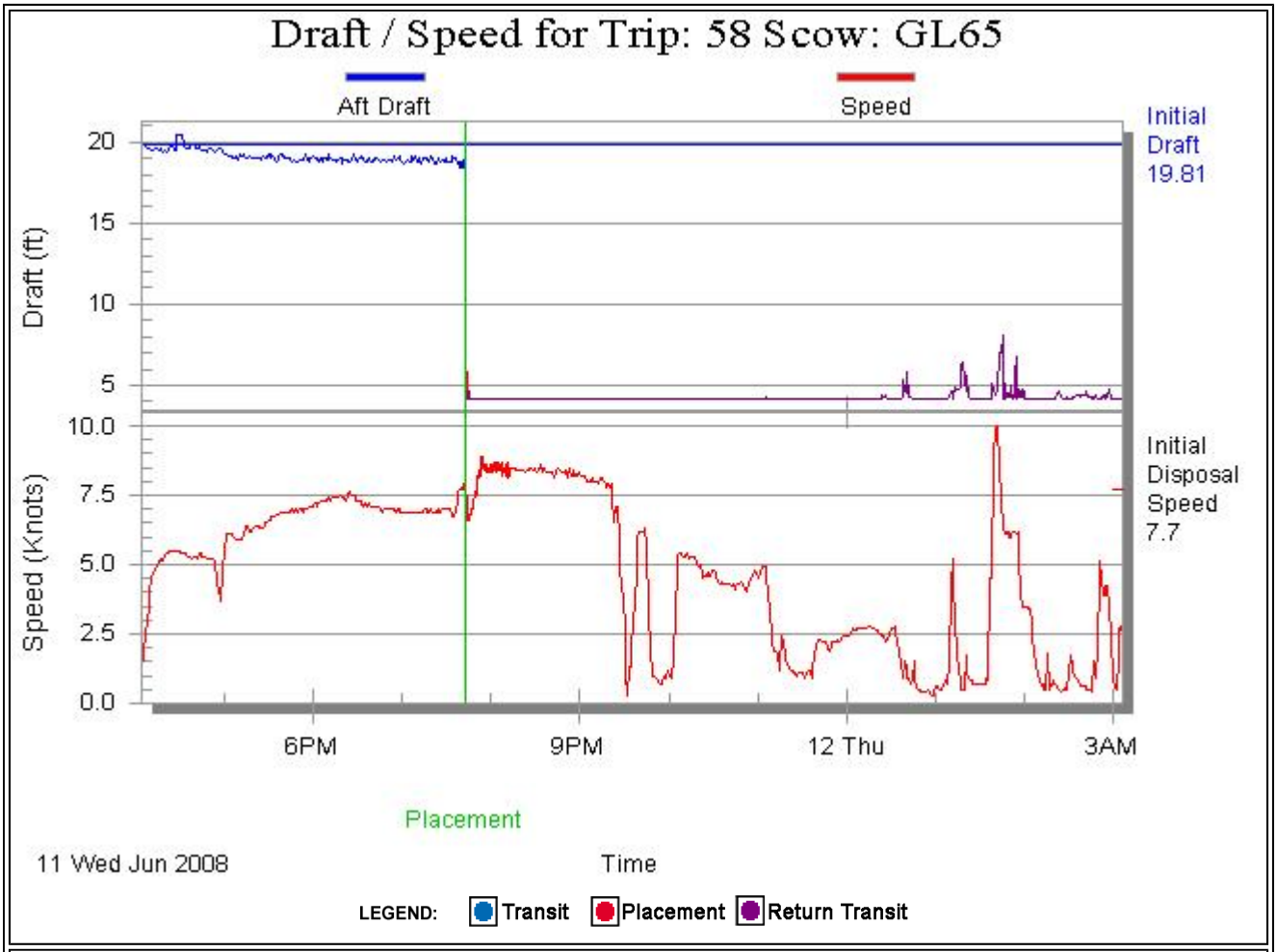


Trip Information

Trip #:	58
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/11/2008 16:04:05
Init Aft Draft:	19.81 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/11/2008 19:42:49
Latitude:	42.417958
Longitude:	-70.602306
Aft Draft:	18.48 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/11/2008 19:43:40
Latitude:	42.419234
Longitude:	-70.600611
Aft Draft:	4.16 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061308_085412

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

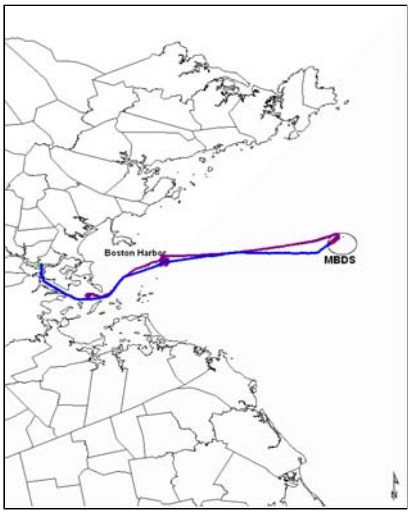
Trip Information:

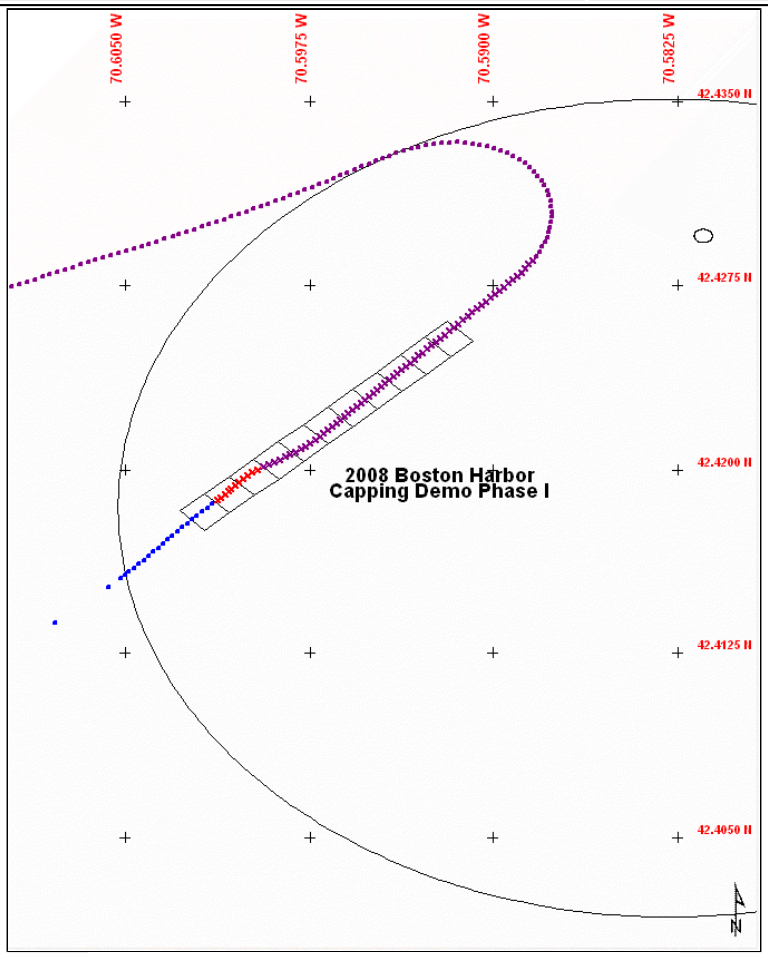
Trip #:	59
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5375 cu yd
Start Time:	6/12/2008 02:58:23
Init Aft Draft:	20.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/12/2008 06:55:34	**Time:**	6/12/2008 06:56:27
Lat:	42.418723	**Lat:**	42.419994
Long:	-70.601264	**Long:**	-70.599628
Aft Draft:	20.95 ft	**Aft Draft:**	9.05 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/12/2008 2:58:23 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061308_085359

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Trip Information

Trip #:	59
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5375 cu yd
Start Time:	6/12/2008 02:58:23
Init Aft Draft:	20.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/12/2008 06:55:34
Latitude:	42.418723
Longitude:	-70.601264
Aft Draft:	20.95 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/12/2008 06:56:27
Latitude:	42.419994
Longitude:	-70.599628
Aft Draft:	9.05 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061308_085359

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

Trip #:	60
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/12/2008 15:20:39
Init Aft Draft:	19.07 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

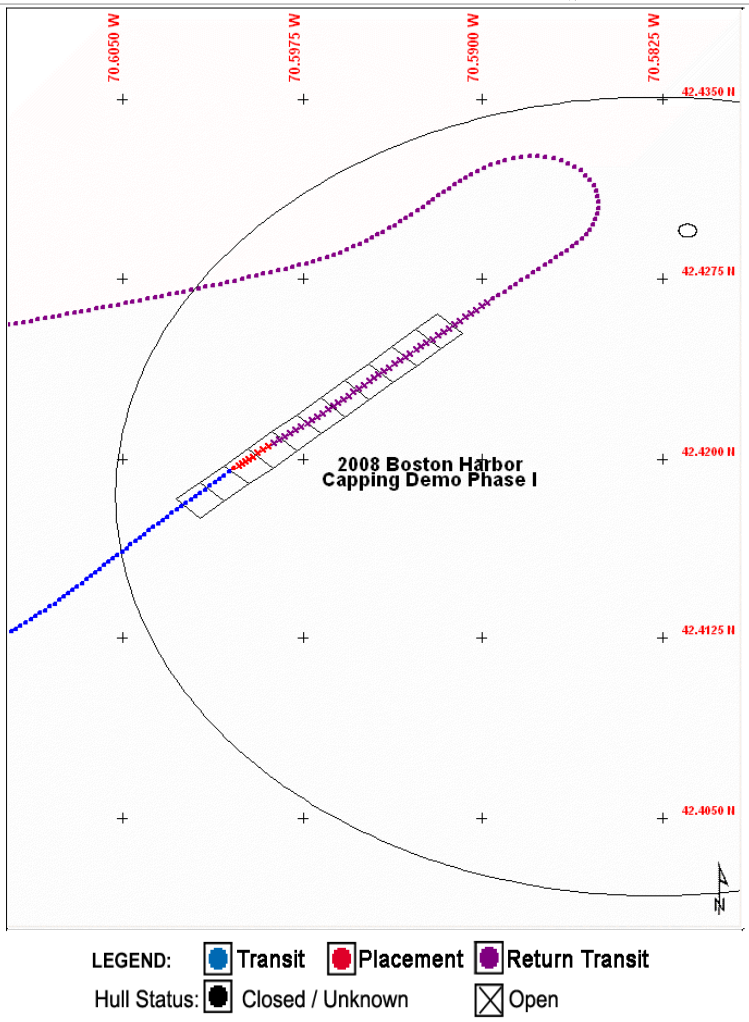
	Placement Start:	Placement End:
Time:	6/12/2008 19:00:36	6/12/2008 19:01:17
Lat:	42.419563	42.420529
Long:	-70.600380	-70.598952
Aft Draft:	17.74 ft	4.23 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/12/2008 3:06:00 PM (Local)

Wave Height: 2.3 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



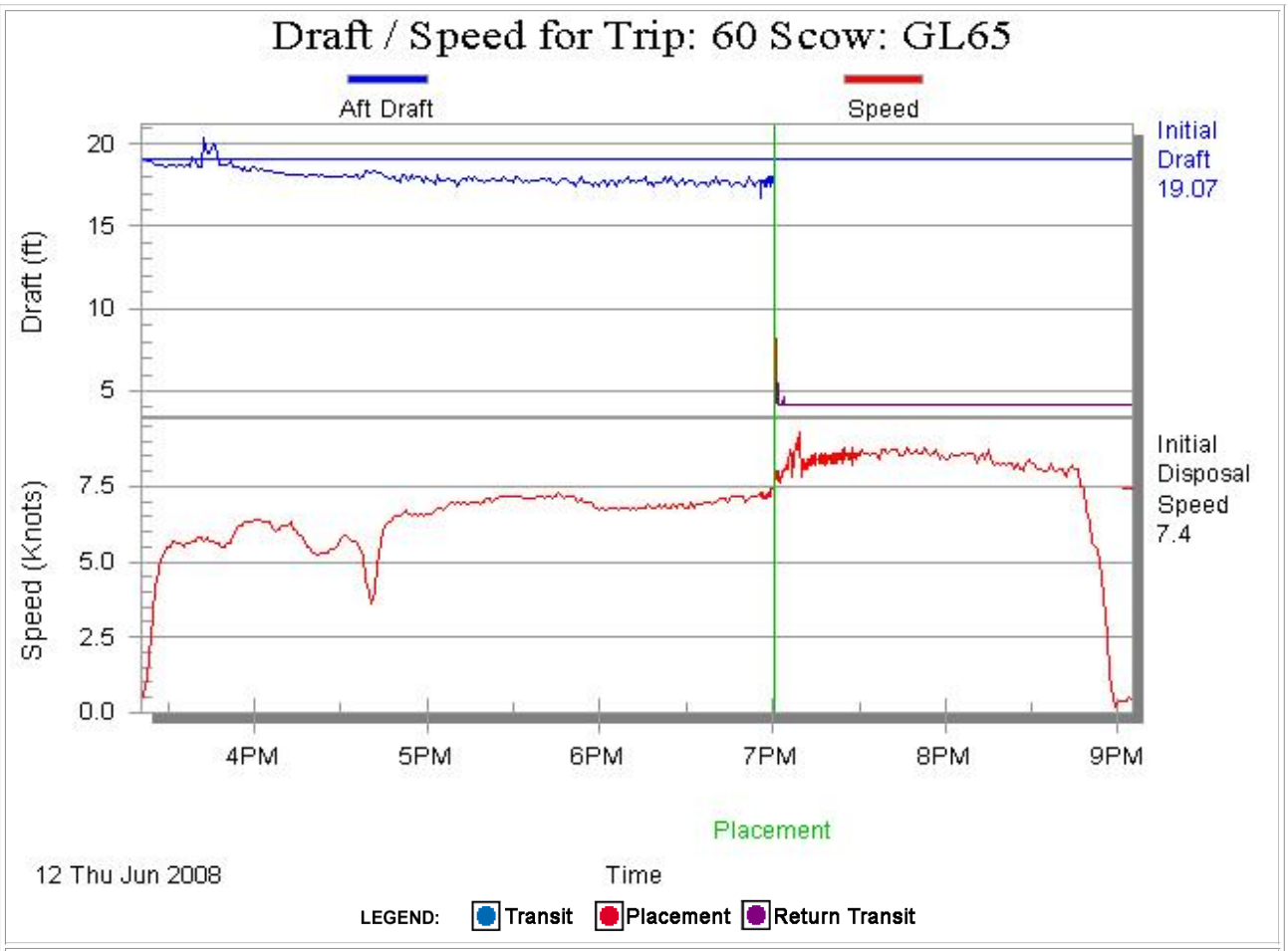


Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061308_142250

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	60
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/12/2008 15:20:39
Init Aft Draft:	19.07 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/12/2008 19:00:36
Latitude:	42.419563
Longitude:	-70.600380
Aft Draft:	17.74 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/12/2008 19:01:17
Latitude:	42.420529
Longitude:	-70.598952
Aft Draft:	4.23 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061308_142250

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	61
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/13/2008 05:08:04
Init Aft Draft:	20.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

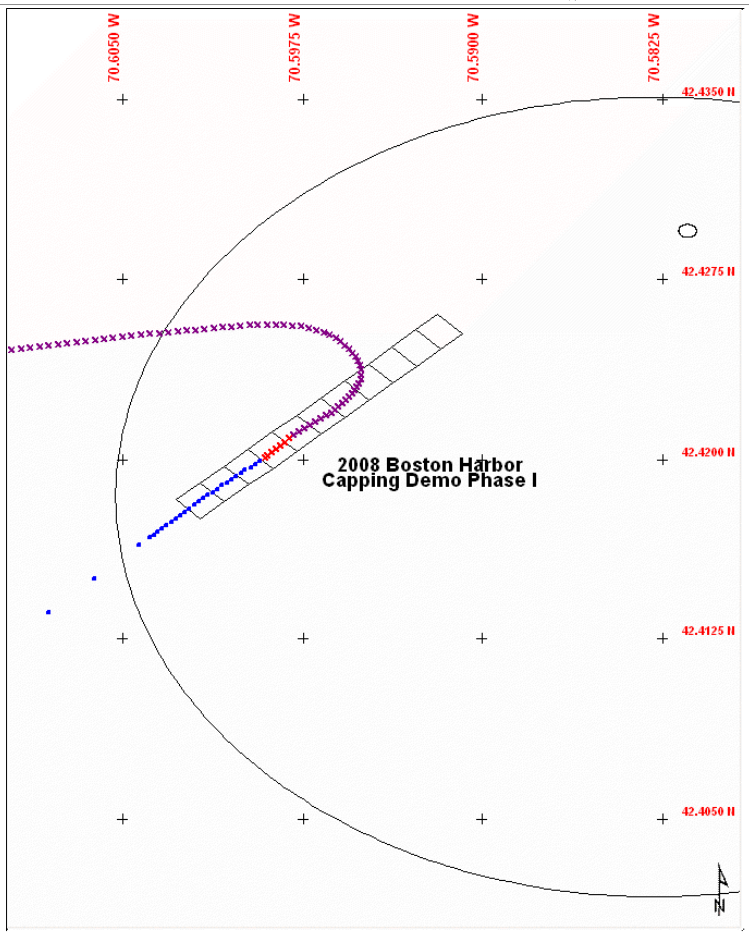
	Placement Start:	Placement End:
Time:	6/13/2008 08:21:46	6/13/2008 08:22:19
Lat:	42.420081	42.420900
Long:	-70.599095	-70.598103
Aft Draft:	20.95 ft	7.62 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/13/2008 5:06:00 AM (Local)

Wave Height: 1.6 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013



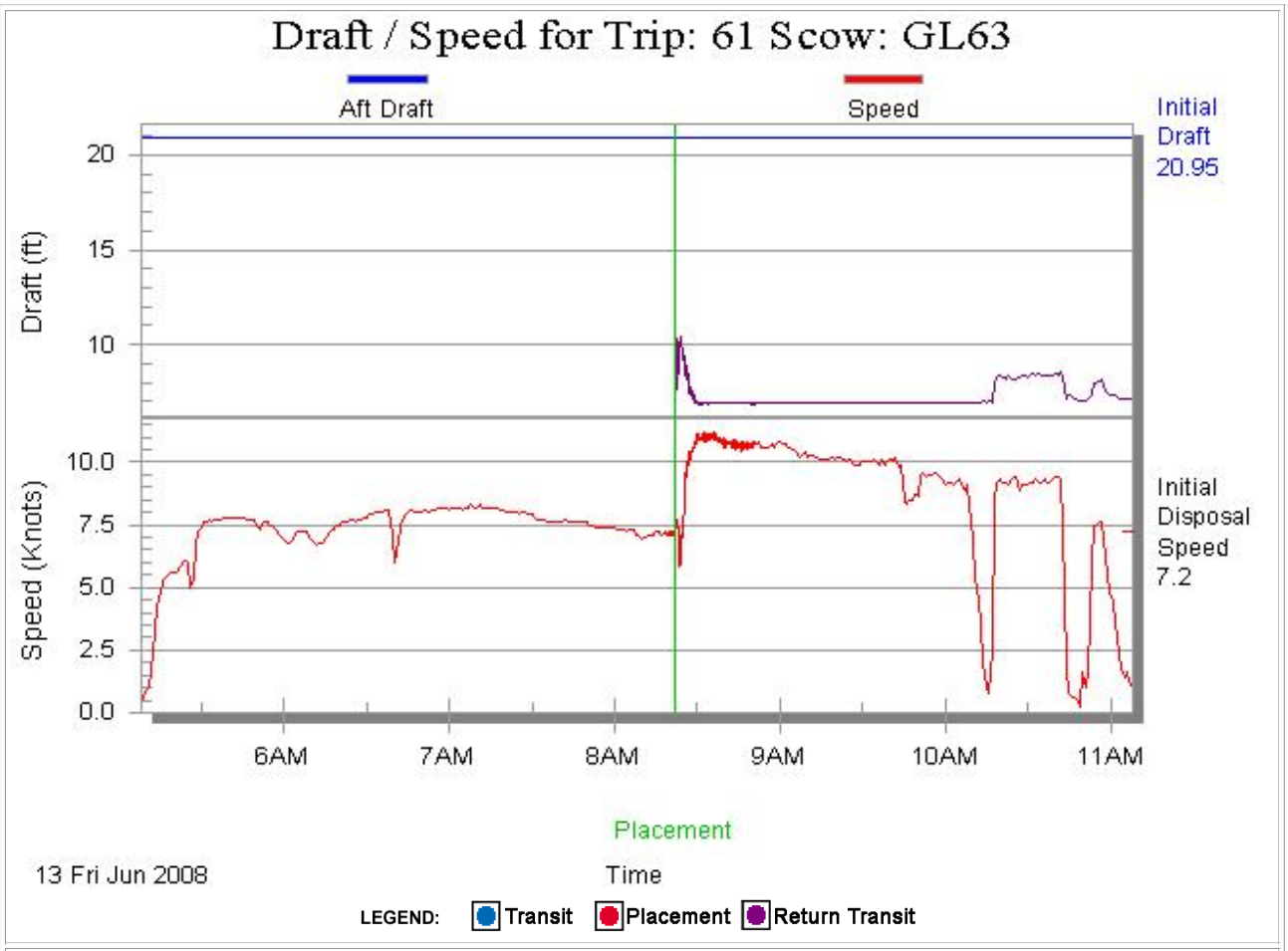


Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061308_142936

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	61
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/13/2008 05:08:04
Init Aft Draft:	20.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	6/13/2008 08:21:46	**Time:**	6/13/2008 08:22:19
Latitude:	42.420081	**Latitude:**	42.420900
Longitude:	-70.599095	**Longitude:**	-70.598103
Aft Draft:	20.95 ft	**Aft Draft:**	7.62 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061308_142936

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

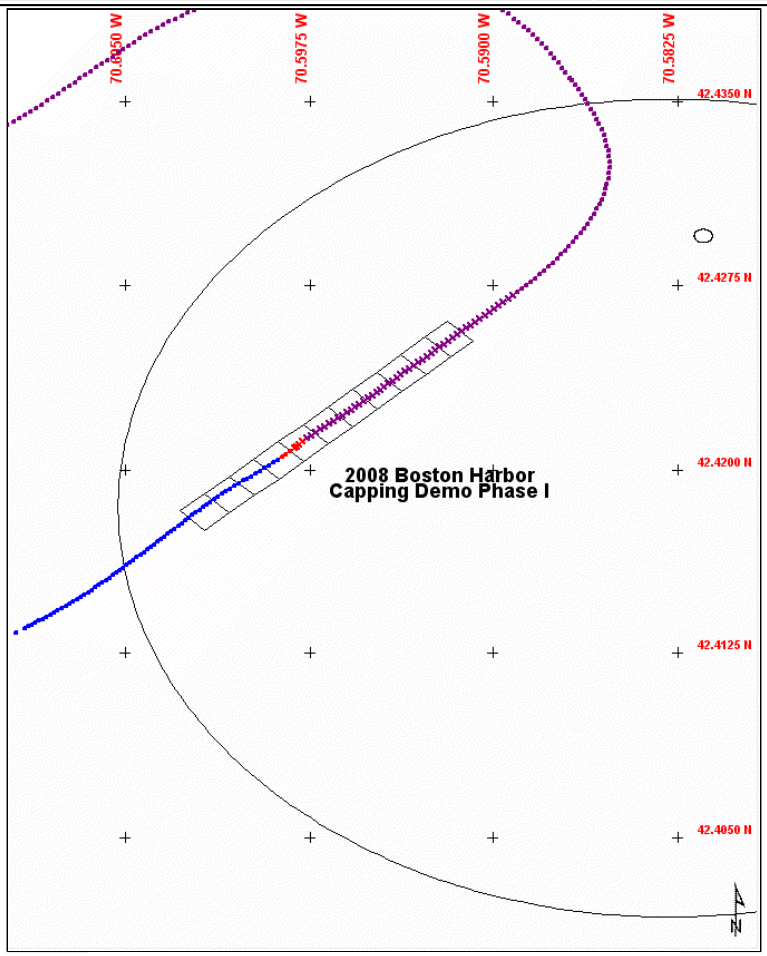
Trip #:	62
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/13/2008 18:23:28
Init Aft Draft:	19.58 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/13/2008 23:32:36	**Time:**	6/13/2008 23:33:07
Lat:	42.420517	**Lat:**	42.421155
Long:	-70.598651	**Long:**	-70.597795
Aft Draft:	18.85 ft	**Aft Draft:**	7.03 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/13/2008 6:04:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061608_110839

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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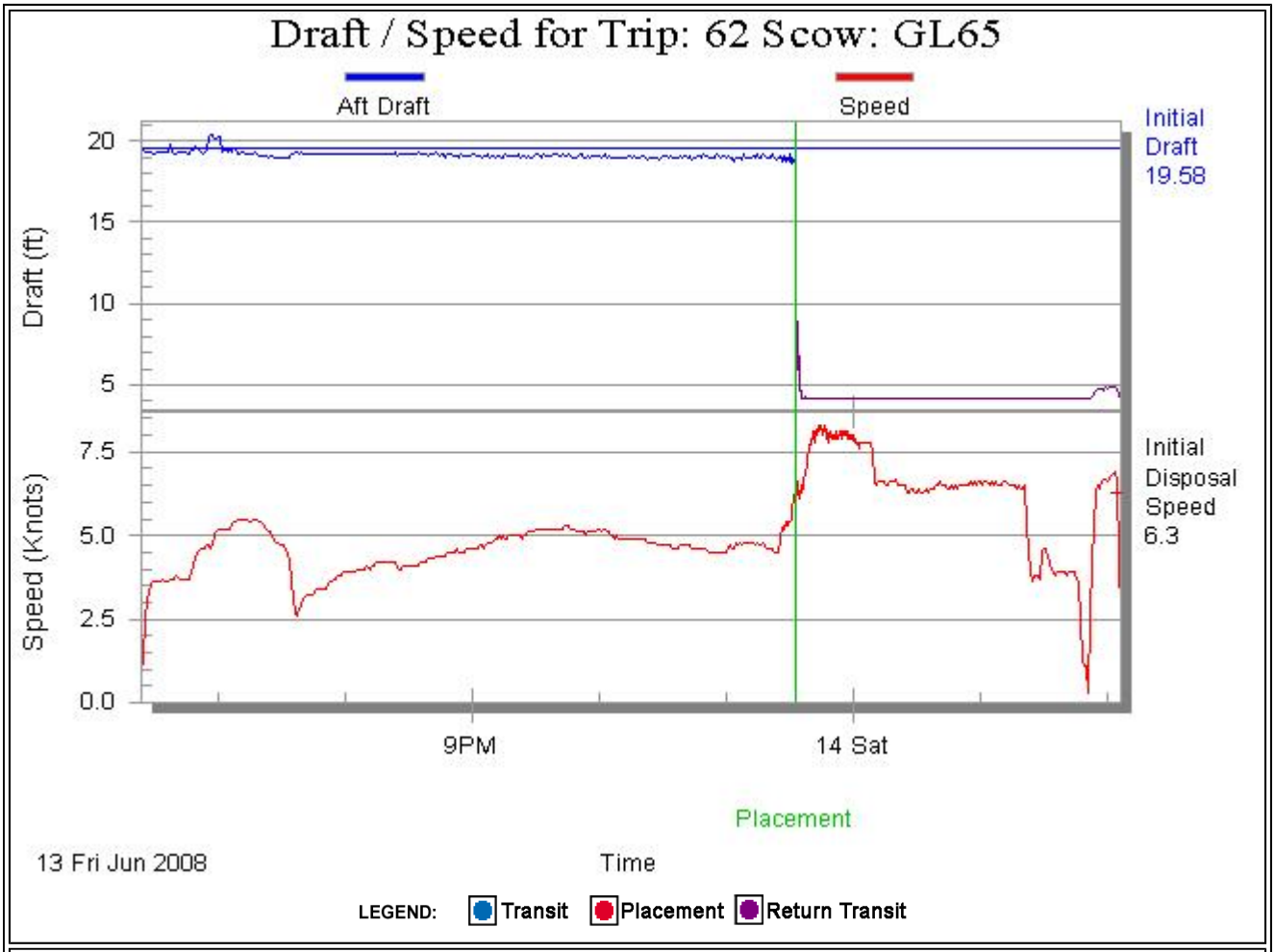

Trip Information

Trip #:	62
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/13/2008 18:23:28
Init Aft Draft:	19.58 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/13/2008 23:32:36	**Time:**	6/13/2008 23:33:07
Latitude:	42.420517	**Latitude:**	42.421155
Longitude:	-70.598651	**Longitude:**	-70.597795
Aft Draft:	18.85 ft	**Aft Draft:**	7.03 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061608_110839

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

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Trip Information:

Trip #:	63
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/14/2008 07:35:10
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

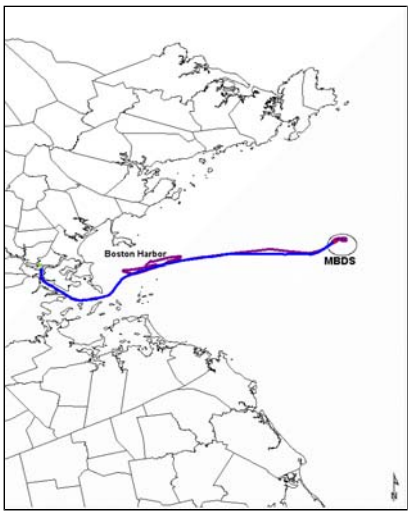
Placement Information:

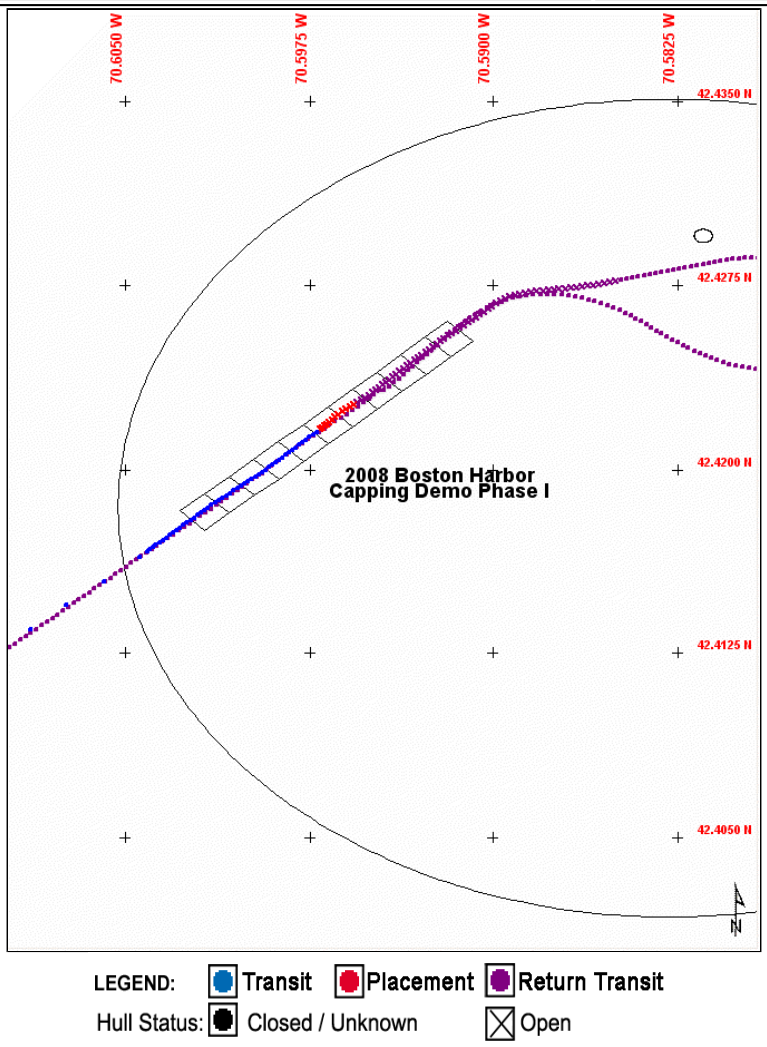
	Placement Start:	Placement End:
Time:	6/14/2008 12:14:21	6/14/2008 12:15:20
Lat:	42.421642	42.422656
Long:	-70.597100	-70.595731
Aft Draft:	21.03 ft	9.44 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/14/2008 7:40:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061608_110800

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W912WJ-07-C-0023

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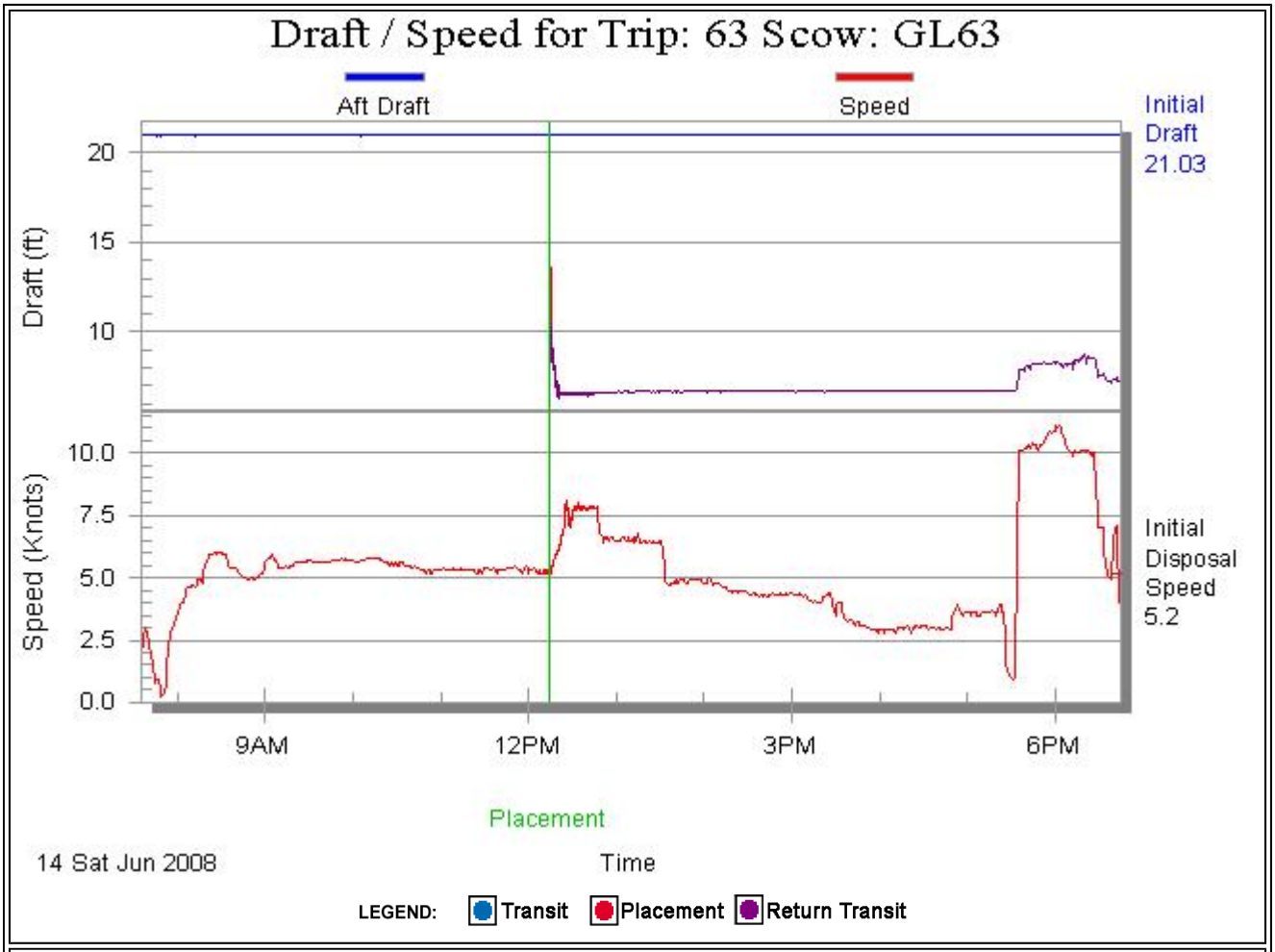


Trip Information

Trip #:	63
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/14/2008 07:35:10
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/14/2008 12:14:21	**Time:**	6/14/2008 12:15:20
Latitude:	42.421642	**Latitude:**	42.422656
Longitude:	-70.597100	**Longitude:**	-70.595731
Aft Draft:	21.03 ft	**Aft Draft:**	9.44 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061608_110800

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

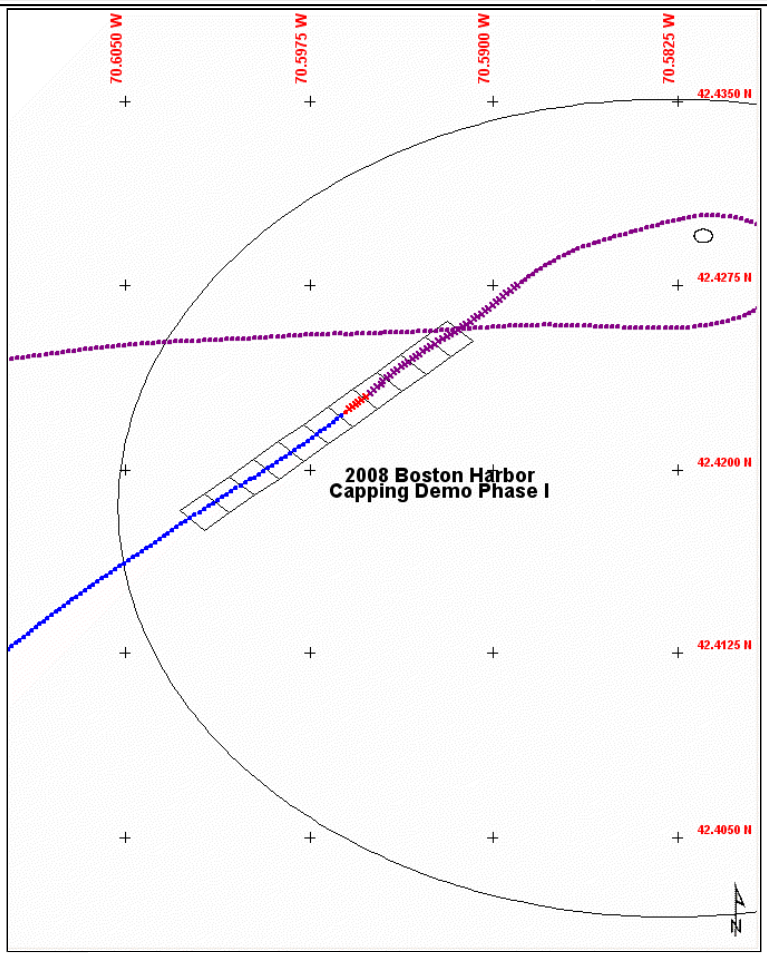
Trip #:	64
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/14/2008 19:25:06
Init Aft Draft:	18.62 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/15/2008 00:14:17	**Time:**	6/15/2008 00:14:46
Lat:	42.422329	**Lat:**	42.422985
Long:	-70.596051	**Long:**	-70.595213
Aft Draft:	17.74 ft	**Aft Draft:**	5.78 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/14/2008 7:54:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061608_111532

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
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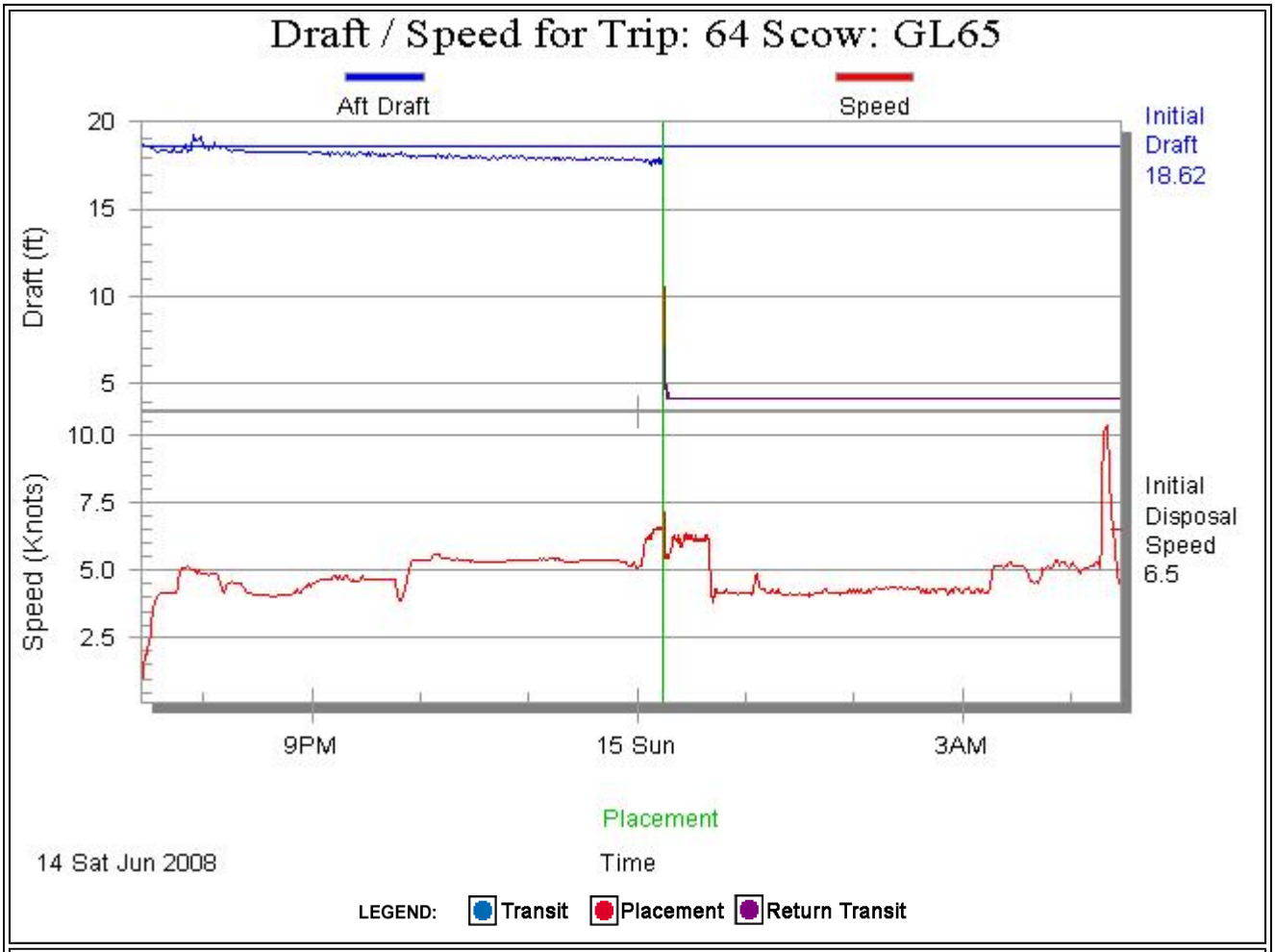


Trip Information

Trip #:	64
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/14/2008 19:25:06
Init Aft Draft:	18.62 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/15/2008 00:14:17	**Time:**	6/15/2008 00:14:46
Latitude:	42.422329	**Latitude:**	42.422985
Longitude:	-70.596051	**Longitude:**	-70.595213
Aft Draft:	17.74 ft	**Aft Draft:**	5.78 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061608_111532

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
From Science to Solutions™

Trip Information:

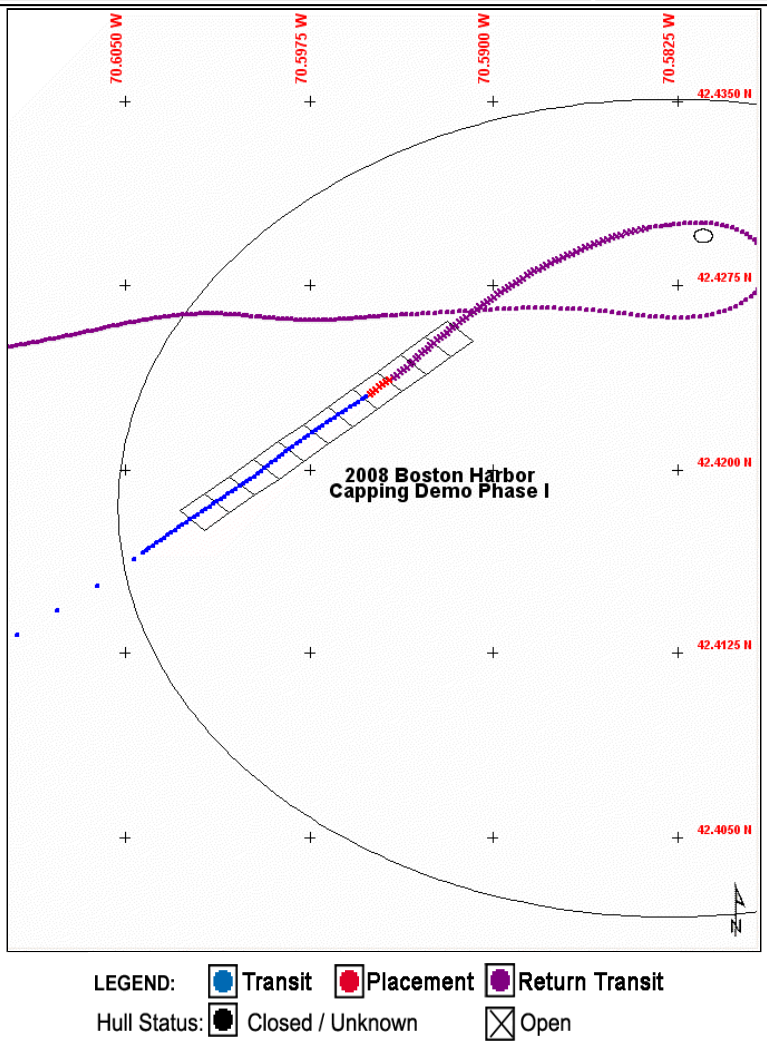
Trip #:	65
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/15/2008 11:12:33
Init Aft Draft:	20.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/15/2008 15:32:51	**Time:**	6/15/2008 15:33:24
Lat:	42.423086	**Lat:**	42.423665
Long:	-70.595052	**Long:**	-70.594219
Aft Draft:	20.95 ft	**Aft Draft:**	9.52 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/15/2008 11:00:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061608_110726

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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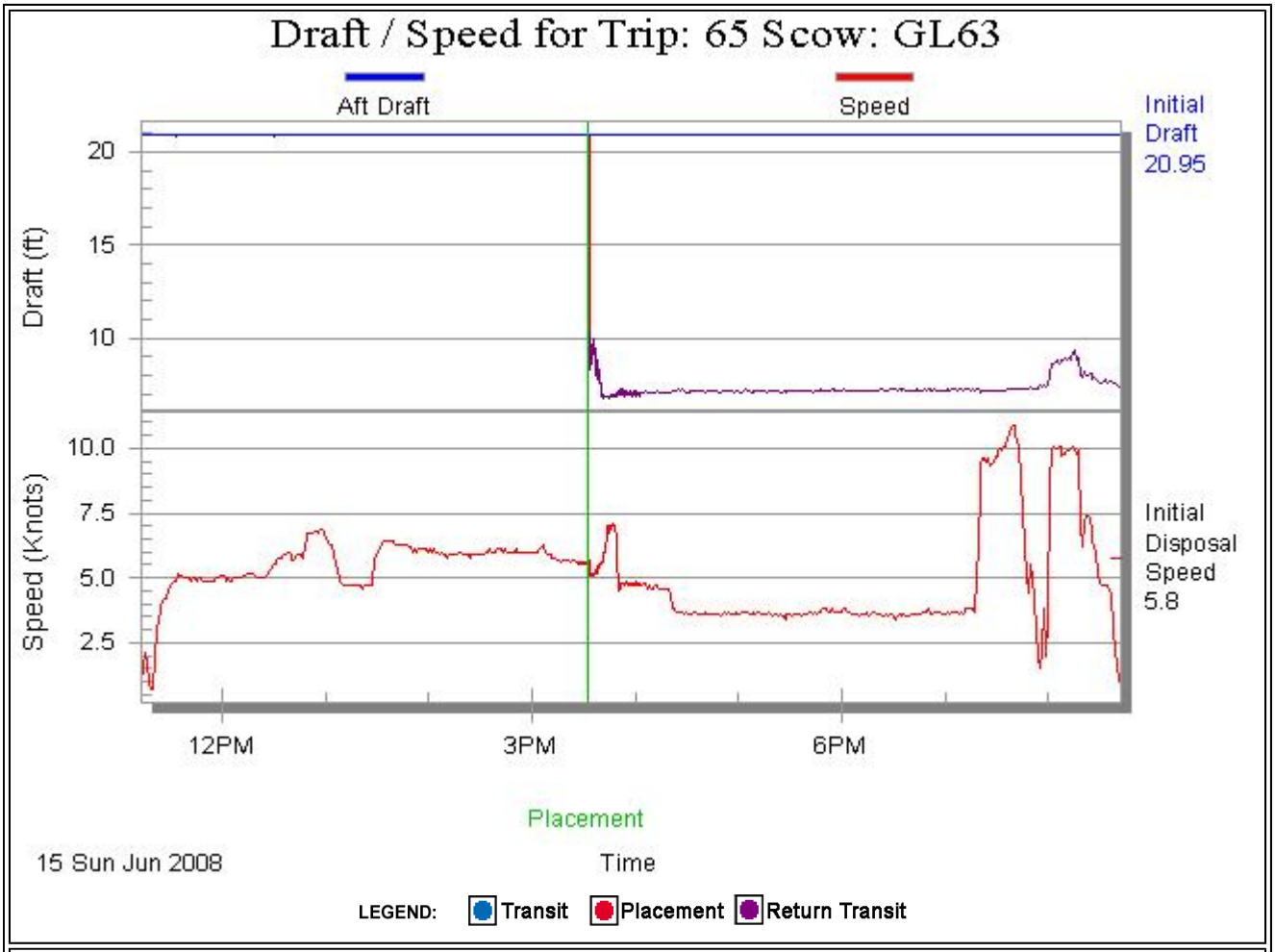

Trip Information

Trip #:	65
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/15/2008 11:12:33
Init Aft Draft:	20.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/15/2008 15:32:51	**Time:**	6/15/2008 15:33:24
Latitude:	42.423086	**Latitude:**	42.423665
Longitude:	-70.595052	**Longitude:**	-70.594219
Aft Draft:	20.95 ft	**Aft Draft:**	9.52 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061608_110726

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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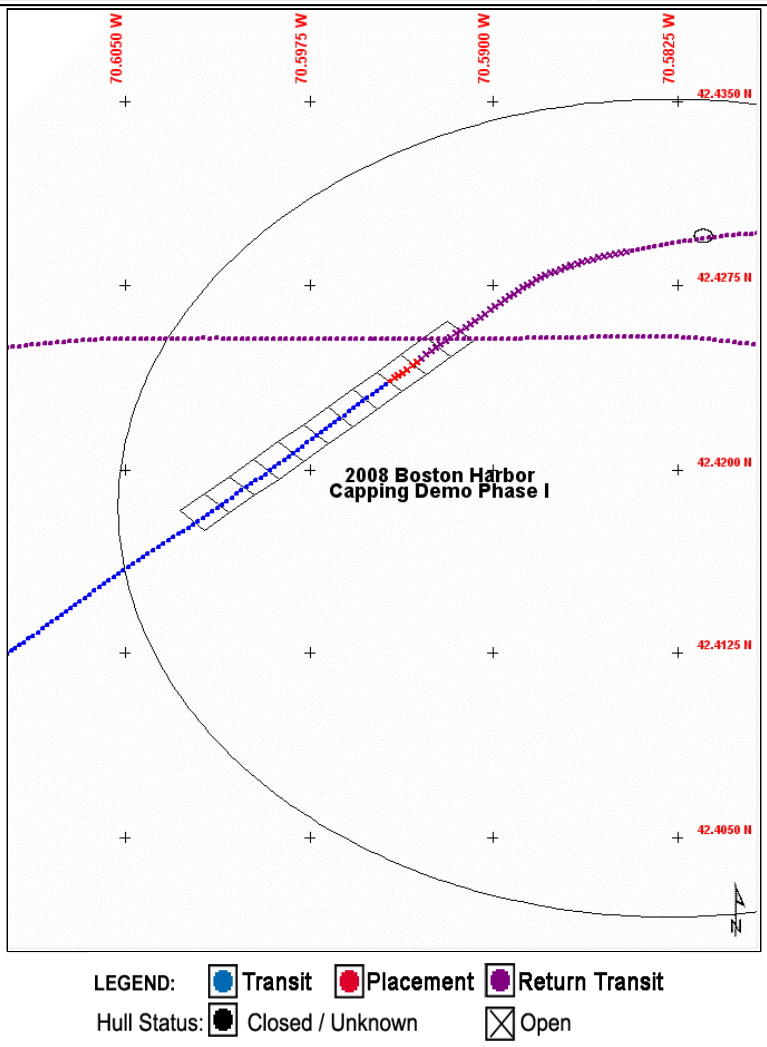
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	66				
Tug:	Lemmerhirt	**Time:**	6/16/2008 04:39:53	**Time:**	6/16/2008 04:40:26
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.423603	**Lat:**	42.424379
Type:	Split Hull Scow	**Long:**	-70.594182	**Long:**	-70.593108
Technique:	Bottom Dump				
Bin Volume:	5600 cu yd				
Start Time:	6/16/2008 01:12:36				
Init Aft Draft:	18.62 ft	**Aft Draft:**	17.37 ft	**Aft Draft:**	4.67 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/16/2008 12:50:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061608_110647

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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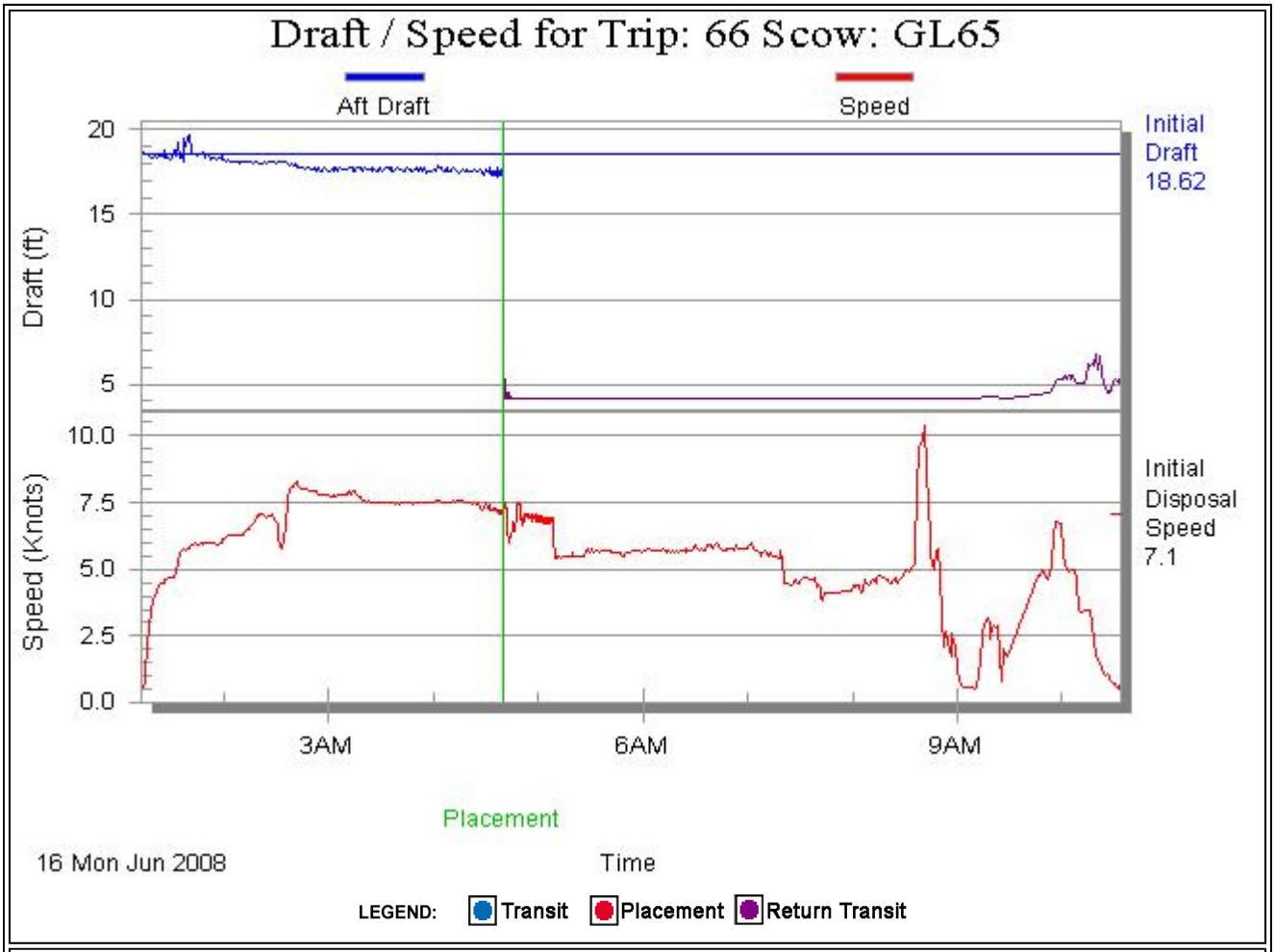


Trip Information

Trip #:	66
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/16/2008 01:12:36
Init Aft Draft:	18.62 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/16/2008 04:39:53
Latitude:	42.423603
Longitude:	-70.594182
Aft Draft:	17.37 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/16/2008 04:40:26
Latitude:	42.424379
Longitude:	-70.593108
Aft Draft:	4.67 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061608_110647

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

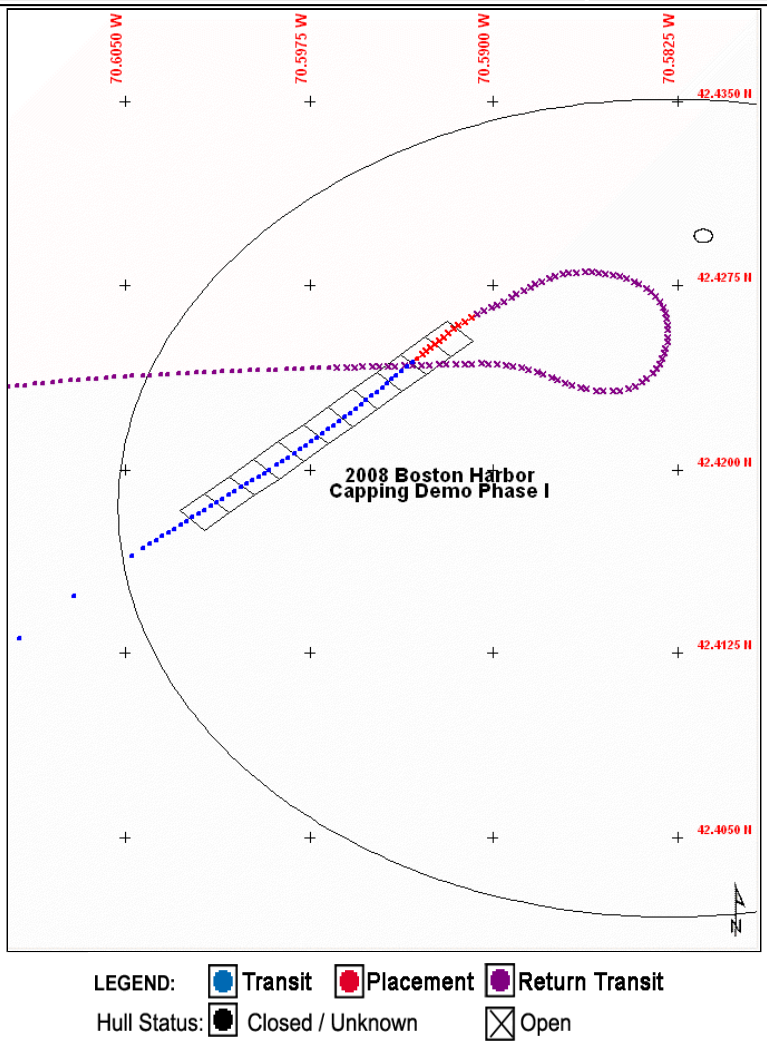
ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	67				
Tug:	Lemmerhirt	**Time:**	6/16/2008 18:21:56	**Time:**	6/16/2008 18:22:56
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.424536	**Lat:**	42.426200
Type:	Split Hull Scow	**Long:**	-70.593085	**Long:**	-70.590858
Technique:	Bottom Dump				
Bin Volume:	5000 cu yd				
Start Time:	6/16/2008 14:44:55				
Init Aft Draft:	20.63 ft	**Aft Draft:**	19.44 ft	**Aft Draft:**	7.54 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/16/2008 2:29:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061708_145648

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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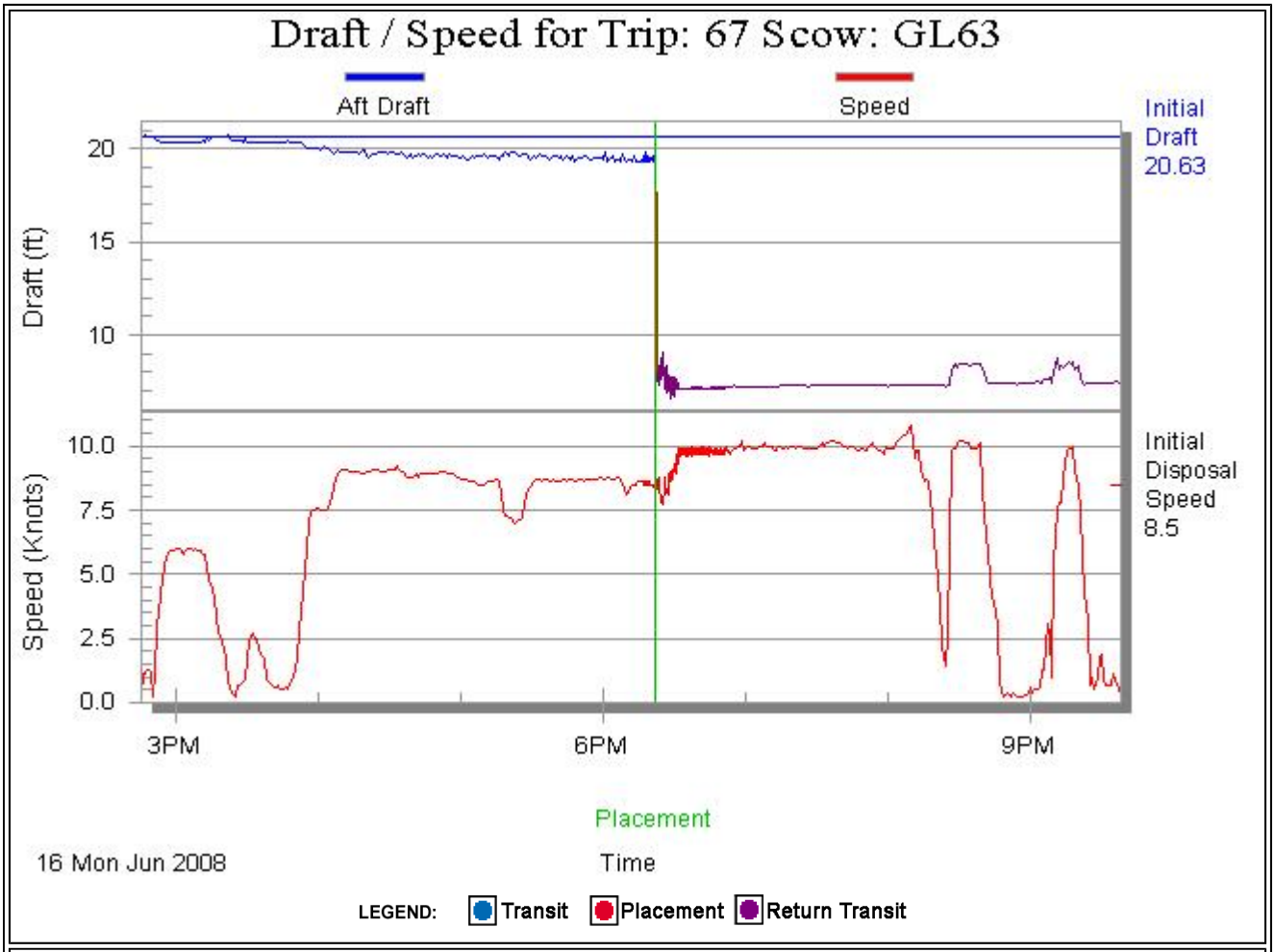


Trip Information

Trip #:	67
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5000 cu yd
Start Time:	6/16/2008 14:44:55
Init Aft Draft:	20.63 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/16/2008 18:21:56
Latitude:	42.424536
Longitude:	-70.593085
Aft Draft:	19.44 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/16/2008 18:22:56
Latitude:	42.426200
Longitude:	-70.590858
Aft Draft:	7.54 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061708_145648

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

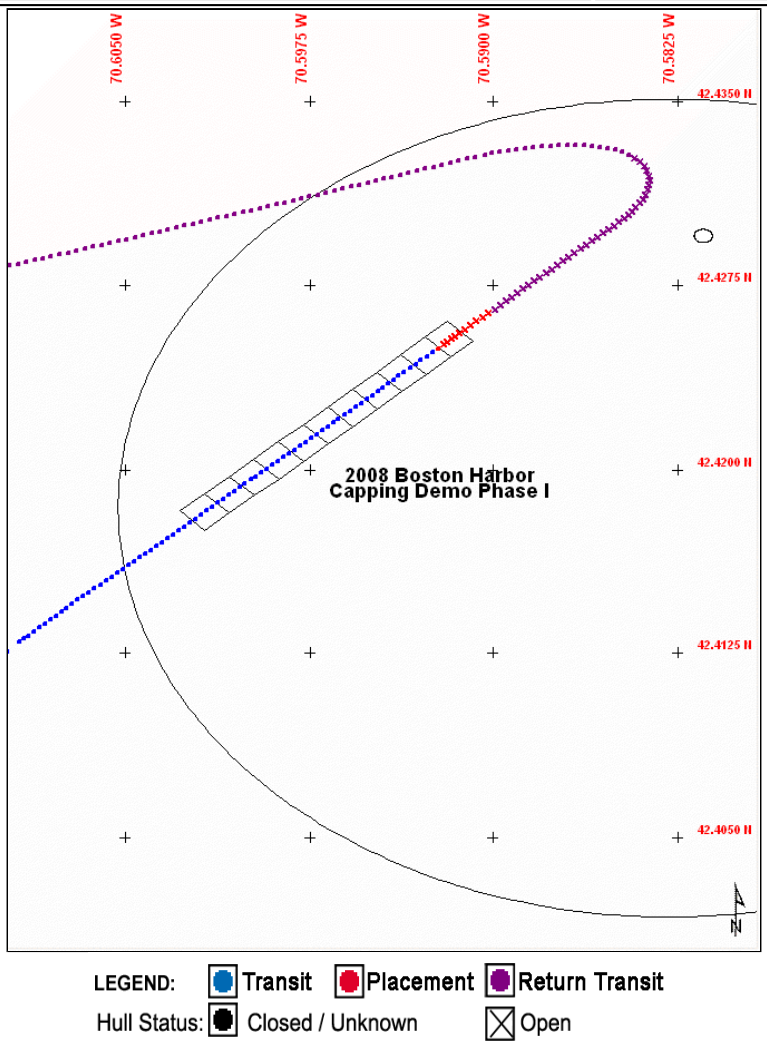
Trip #:	68
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5175 cu yd
Start Time:	6/17/2008 08:00:28
Init Aft Draft:	19.29 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	6/17/2008 11:30:16	6/17/2008 11:31:09
Lat:	42.424935	42.426364
Long:	-70.592248	-70.590189
Aft Draft:	17.89 ft	4.16 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/17/2008 7:34:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061808_151029

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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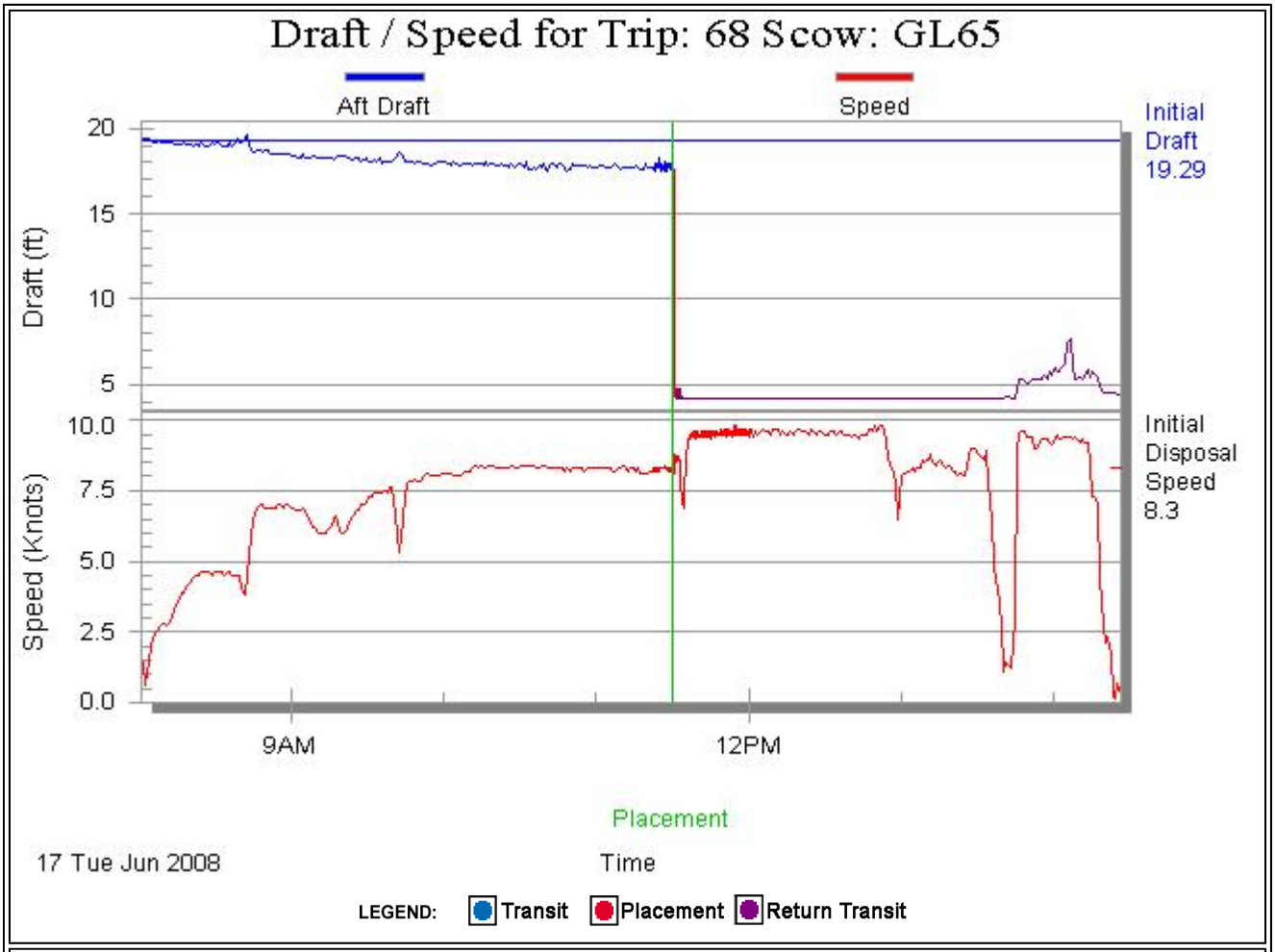


Trip Information

Trip #:	68
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5175 cu yd
Start Time:	6/17/2008 08:00:28
Init Aft Draft:	19.29 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/17/2008 11:30:16	**Time:**	6/17/2008 11:31:09
Latitude:	42.424935	**Latitude:**	42.426364
Longitude:	-70.592248	**Longitude:**	-70.590189
Aft Draft:	17.89 ft	**Aft Draft:**	4.16 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061808_151029

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
From Science to Solutions™

Trip Information:

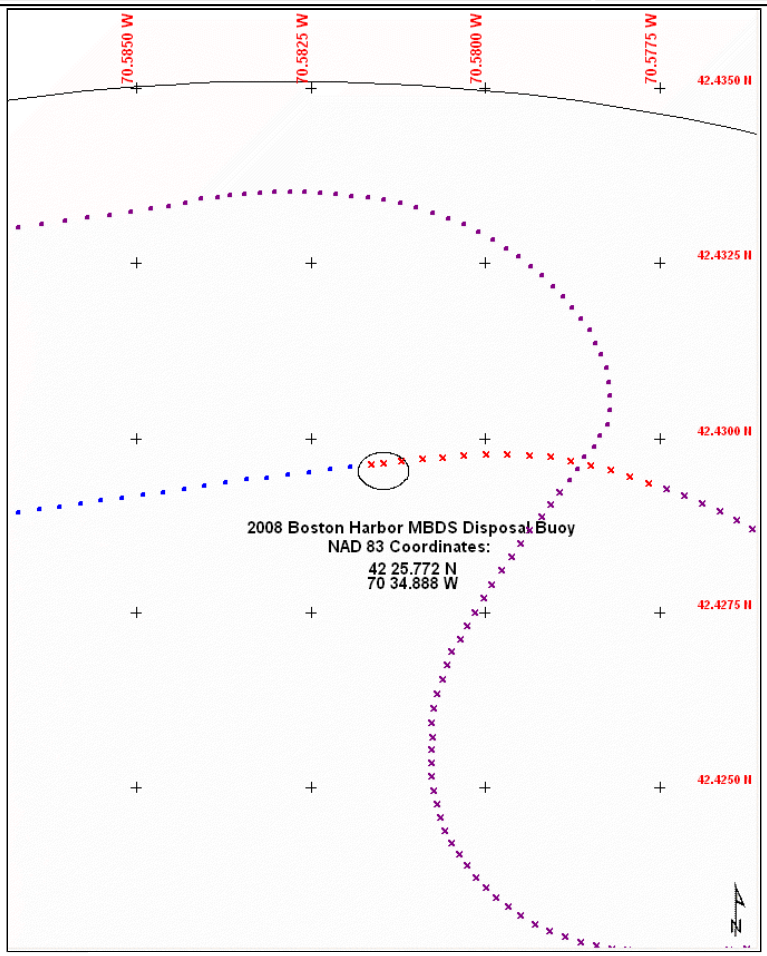
Trip #:	69
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/17/2008 20:02:28
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/17/2008 23:21:32	**Time:**	6/17/2008 23:22:53
Lat:	42.429630	**Lat:**	42.429350
Long:	-70.581642	**Long:**	-70.577671
Aft Draft:	21.03 ft	**Aft Draft:**	9.76 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/17/2008 7:52:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061808_151909

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Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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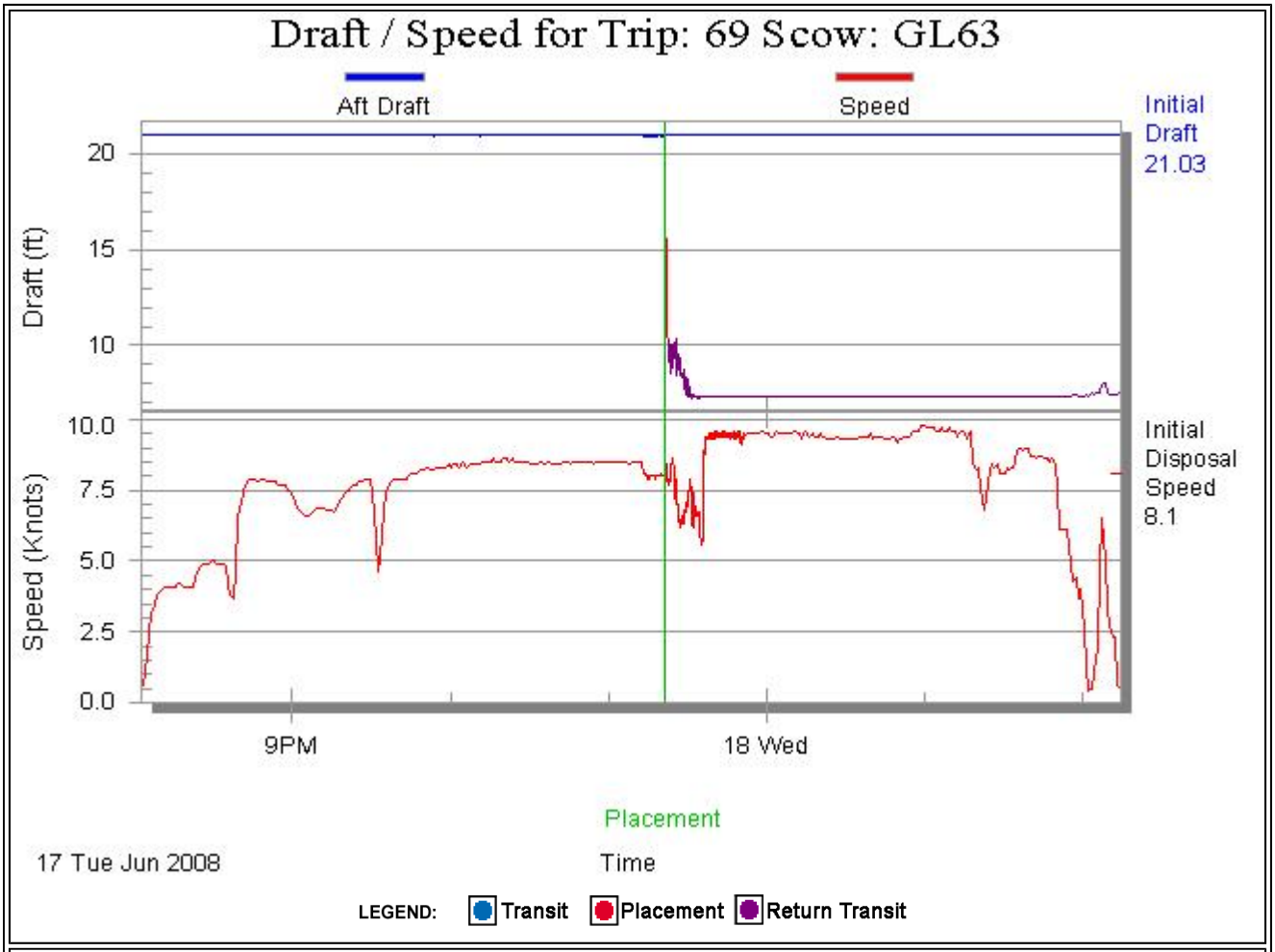


Trip Information

Trip #:	69
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/17/2008 20:02:28
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/17/2008 23:21:32	**Time:**	6/17/2008 23:22:53
Latitude:	42.429630	**Latitude:**	42.429350
Longitude:	-70.581642	**Longitude:**	-70.577671
Aft Draft:	21.03 ft	**Aft Draft:**	9.76 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061808_151909

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

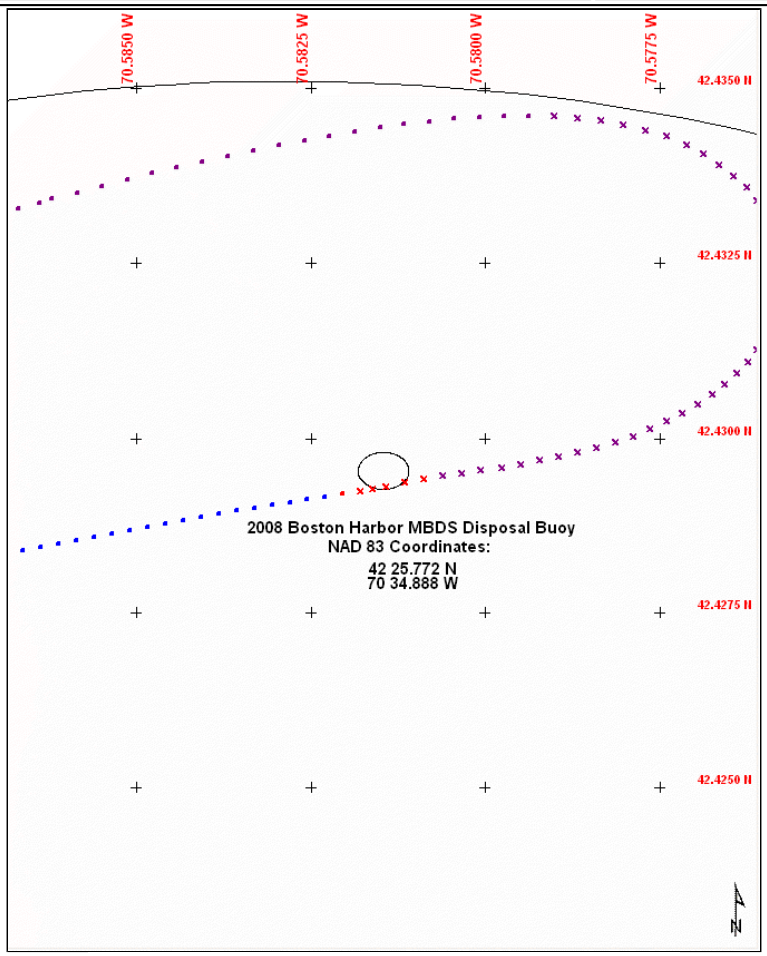
Trip #:	70
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5550 cu yd
Start Time:	6/18/2008 07:37:04
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/18/2008 11:02:58	**Time:**	6/18/2008 11:03:25
Lat:	42.429190	**Lat:**	42.429416
Long:	-70.582056	**Long:**	-70.580884
Aft Draft:	19.07 ft	**Aft Draft:**	4.75 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/18/2008 7:18:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 061808_153102

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
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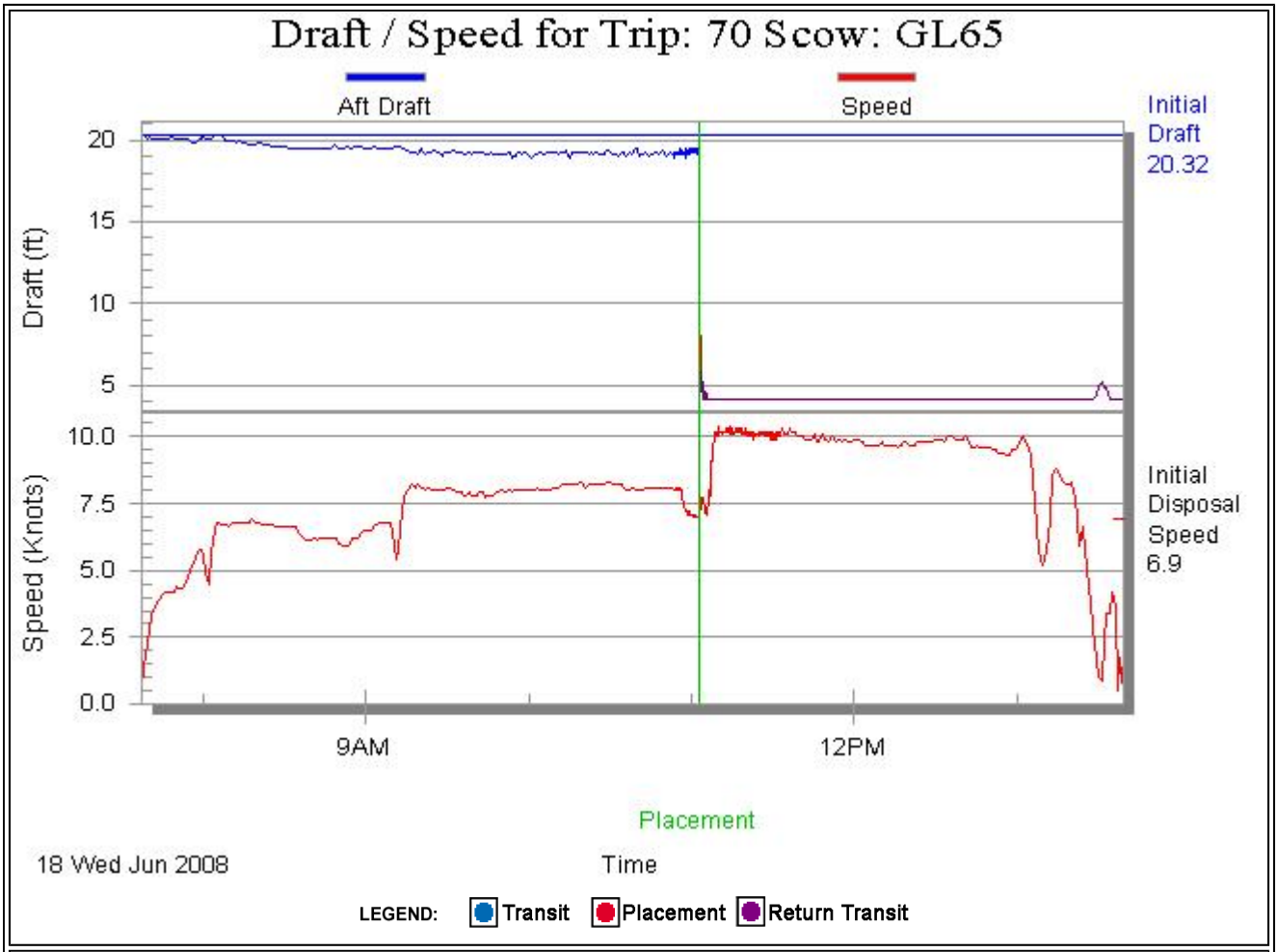


Trip Information

Trip #:	70
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5550 cu yd
Start Time:	6/18/2008 07:37:04
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/18/2008 11:02:58	**Time:**	6/18/2008 11:03:25
Latitude:	42.429190	**Latitude:**	42.429416
Longitude:	-70.582056	**Longitude:**	-70.580884
Aft Draft:	19.07 ft	**Aft Draft:**	4.75 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 061808_153102

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

From Science to Solutions™

Trip Information:

Trip #:	73
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/19/2008 22:49:24
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

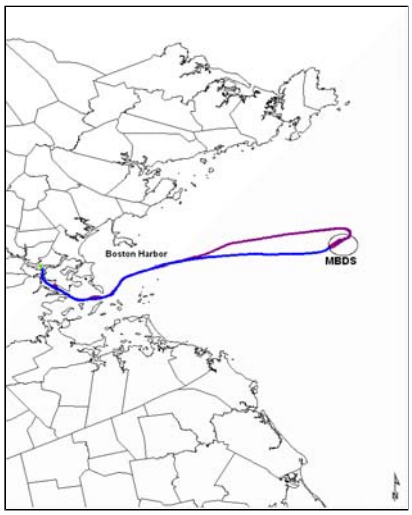
Placement Information:

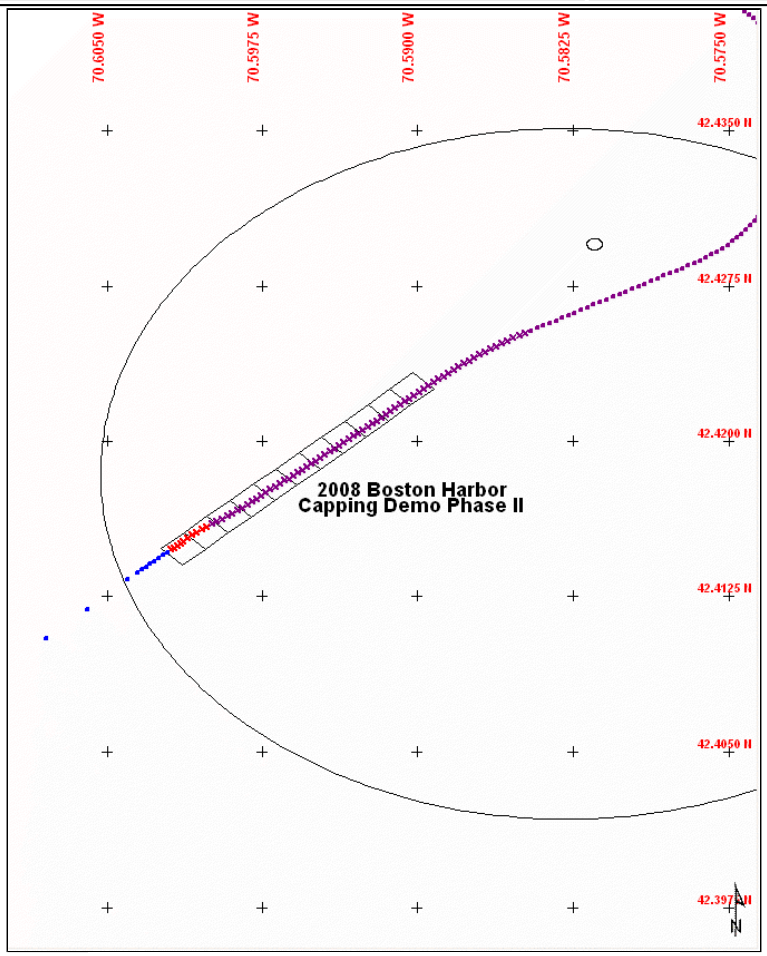
Placement Start:		**Placement End:**	
Time:	6/20/2008 02:21:25	**Time:**	6/20/2008 02:22:12
Lat:	42.414746	**Lat:**	42.415848
Long:	-70.601896	**Long:**	-70.600197
Aft Draft:	20.95 ft	**Aft Draft:**	8.73 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/19/2008 10:28:00 PM (Local)

Wave Height: 1.6 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013





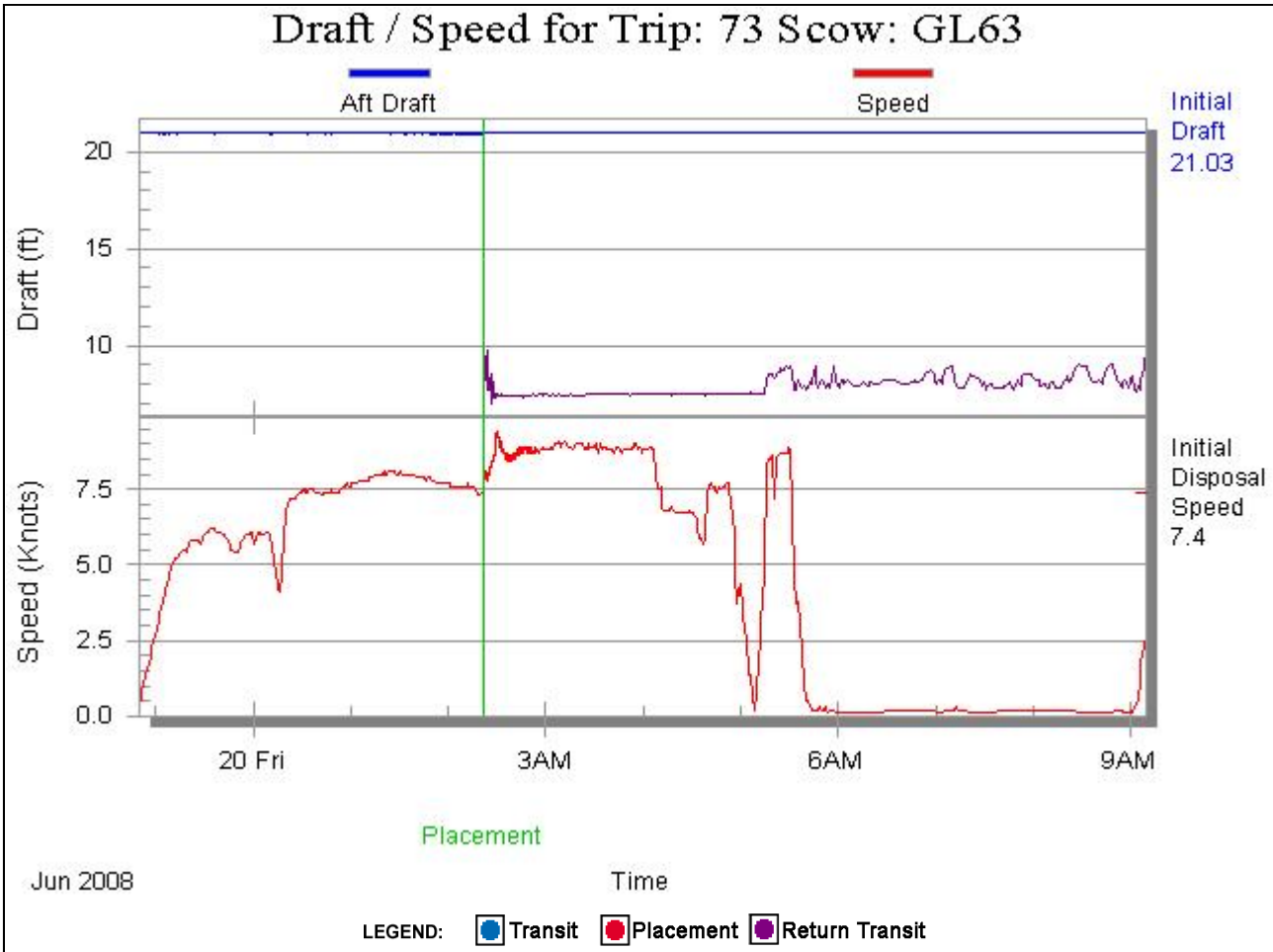
LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 062008_111433

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	73
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/19/2008 22:49:24
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/20/2008 02:21:25	**Time:**	6/20/2008 02:22:12
Latitude:	42.414746	**Latitude:**	42.415848
Longitude:	-70.601896	**Longitude:**	-70.600197
Aft Draft:	20.95 ft	**Aft Draft:**	8.73 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062008_111433

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

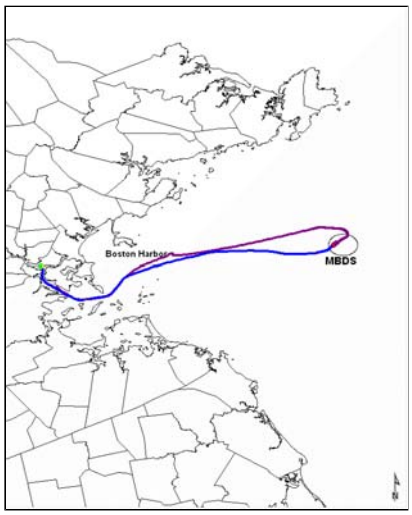
Trip Information:

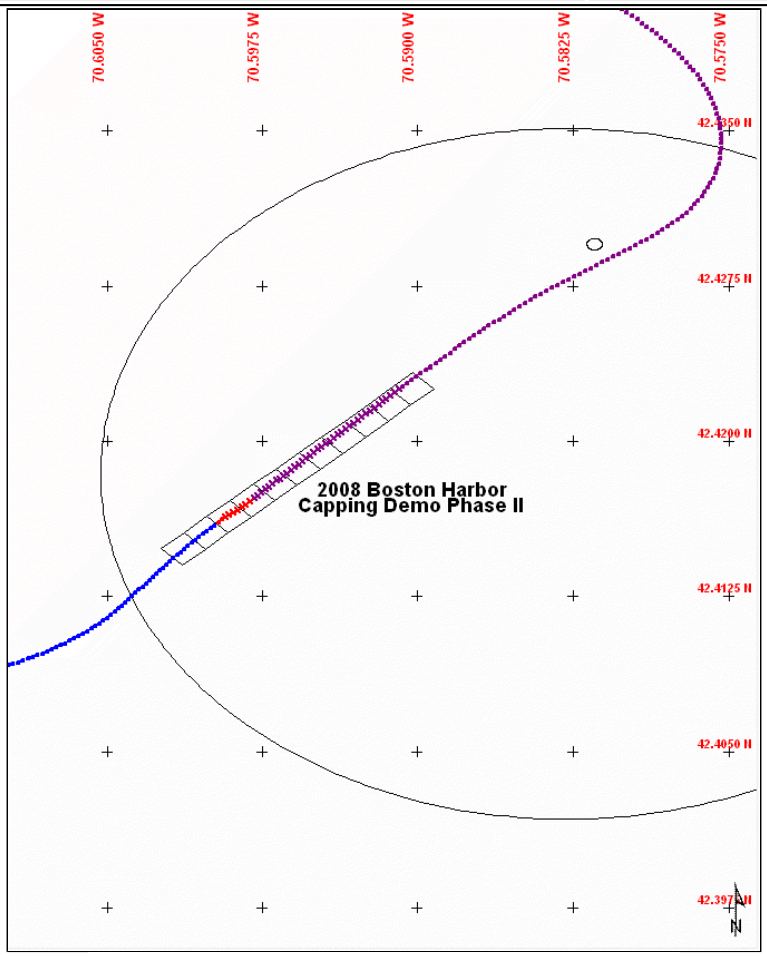
Trip #:	74
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5575 cu yd
Start Time:	6/20/2008 10:01:53
Init Aft Draft:	19.88 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/20/2008 13:25:39	**Time:**	6/20/2008 13:26:24
Lat:	42.416063	**Lat:**	42.417072
Long:	-70.599631	**Long:**	-70.598115
Aft Draft:	18.92 ft	**Aft Draft:**	4.75 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/20/2008 9:38:00 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013

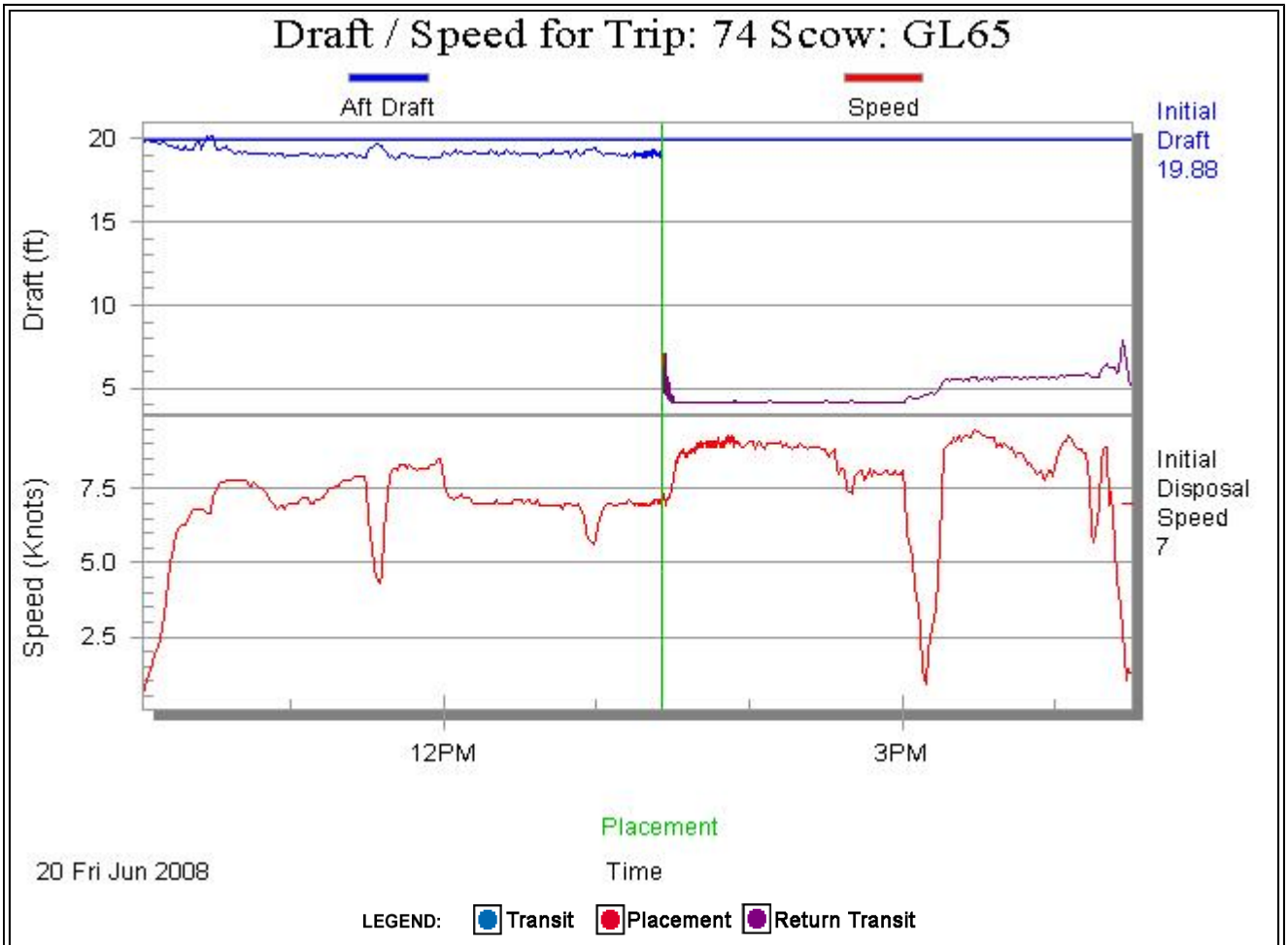




Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 062308_161054

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	74
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5575 cu yd
Start Time:	6/20/2008 10:01:53
Init Aft Draft:	19.88 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/20/2008 13:25:39	**Time:**	6/20/2008 13:26:24
Latitude:	42.416063	**Latitude:**	42.417072
Longitude:	-70.599631	**Longitude:**	-70.598115
Aft Draft:	18.92 ft	**Aft Draft:**	4.75 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062308_161054

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	75
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5550 cu yd
Start Time:	6/21/2008 02:01:31

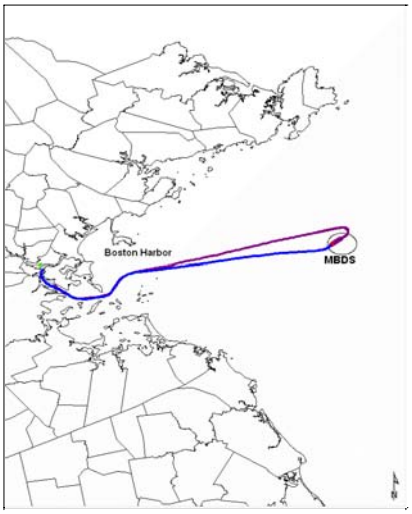
Placement Information:

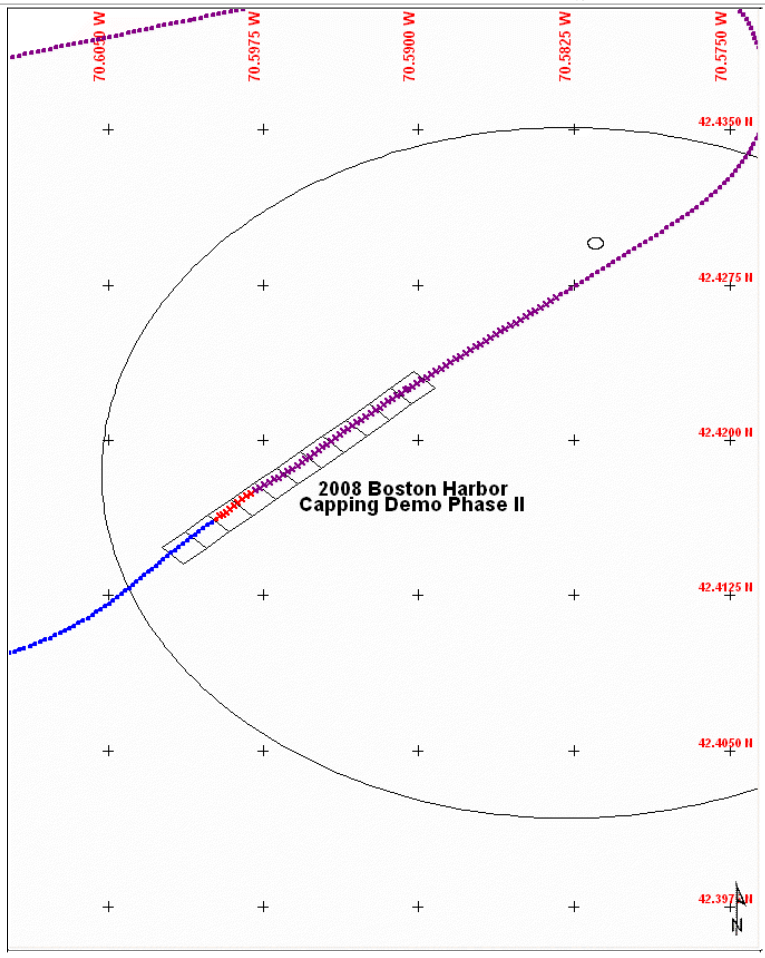
	Placement Start:	Placement End:
Time:	6/21/2008 05:28:43	6/21/2008 05:29:34
Lat:	42.416153	42.417401
Long:	-70.599803	-70.598109
Init Aft Draft:	21.03 ft	
Aft Draft:	20.95 ft	9.76 ft
Init Fore Draft:	N/A	
Fore Draft:	N/A	N/A
Init Aft Bin:	N/A	
Aft Bin:	N/A	N/A
Init Fore Bin:	N/A	
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/21/2008 1:24:00 AM (Local)

Wave Height: 1.0 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062308_161029

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	75
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5550 cu yd
Start Time:	6/21/2008 02:01:31
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/21/2008 05:28:43
Latitude:	42.416153
Longitude:	-70.599803
Aft Draft:	20.95 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/21/2008 05:29:34
Latitude:	42.417401
Longitude:	-70.598109
Aft Draft:	9.76 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062308_161029

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

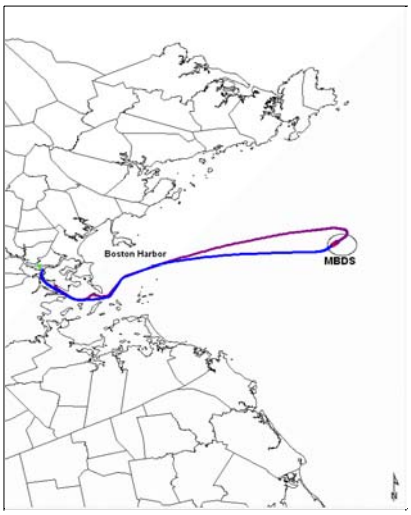
SAIC From Science to Solutions™

Trip Information:

Trip #:	76
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5575 cu yd
Start Time:	6/21/2008 12:49:45
Init Aft Draft:	19.58 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

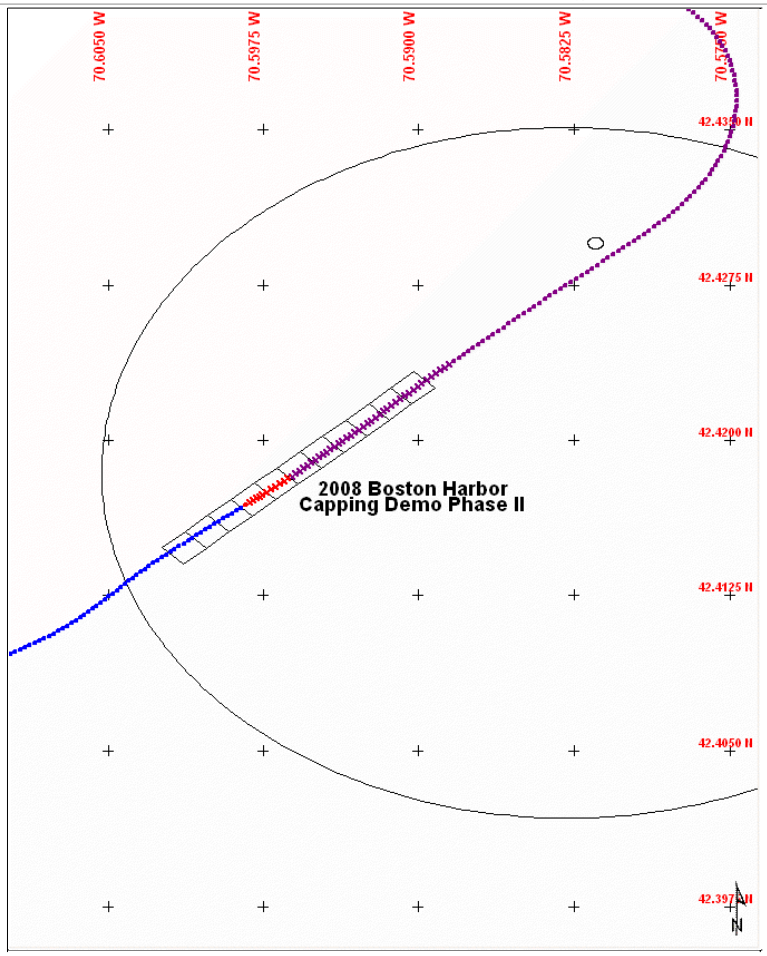
Placement Start:		**Placement End:**	
Time:	6/21/2008 16:53:32	**Time:**	6/21/2008 16:54:31
Lat:	42.416844	**Lat:**	42.418128
Long:	-70.598370	**Long:**	-70.596333
Aft Draft:	18.92 ft	**Aft Draft:**	7.77 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/21/2008 12:07:00 PM (Local)

Wave Height: 1.3 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062308_161721

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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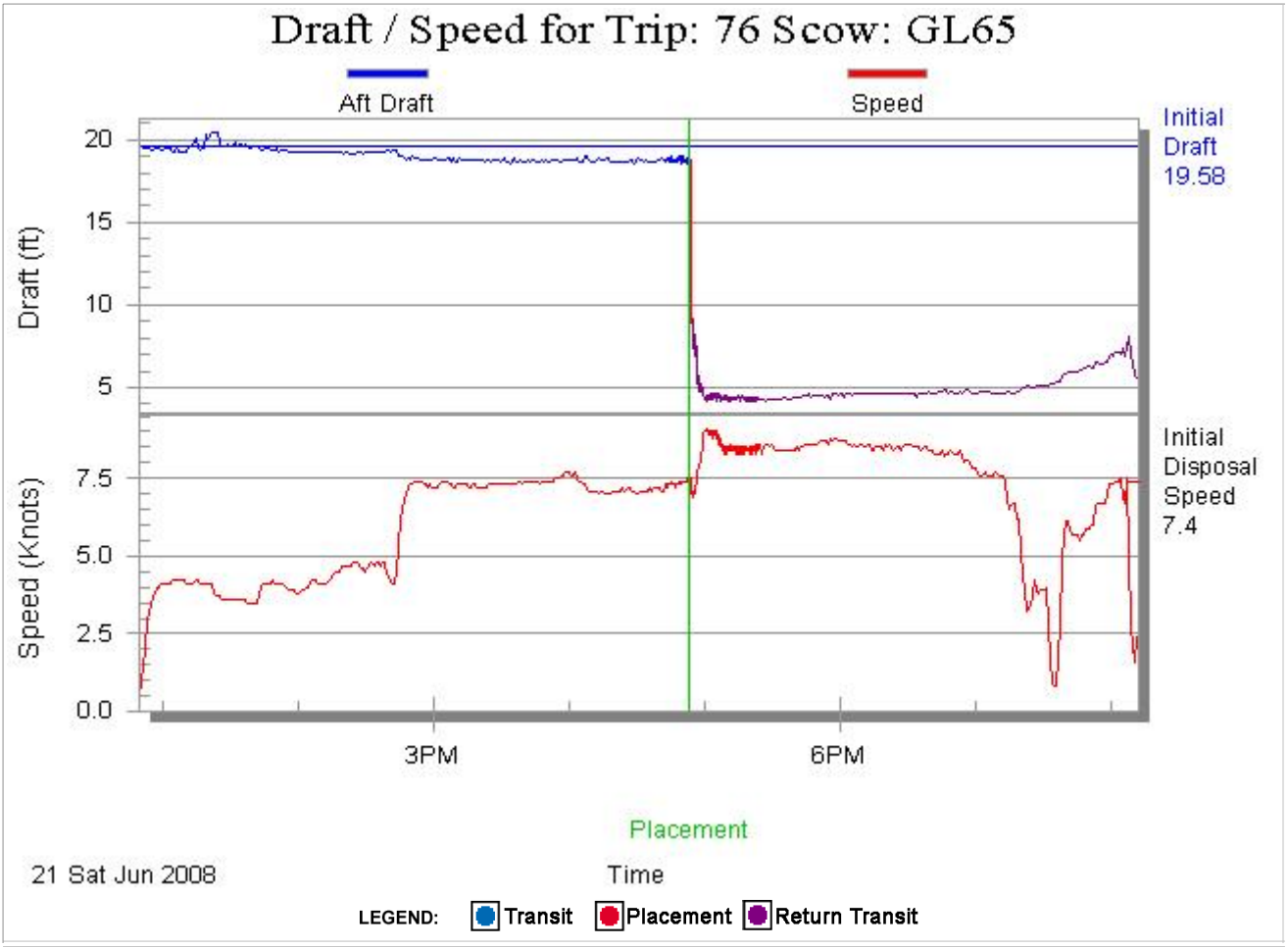


Trip Information

Trip #:	76
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5575 cu yd
Start Time:	6/21/2008 12:49:45
Init Aft Draft:	19.58 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/21/2008 16:53:32
Latitude:	42.416844
Longitude:	-70.598370
Aft Draft:	18.92 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/21/2008 16:54:31
Latitude:	42.418128
Longitude:	-70.596333
Aft Draft:	7.77 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062308_161721

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

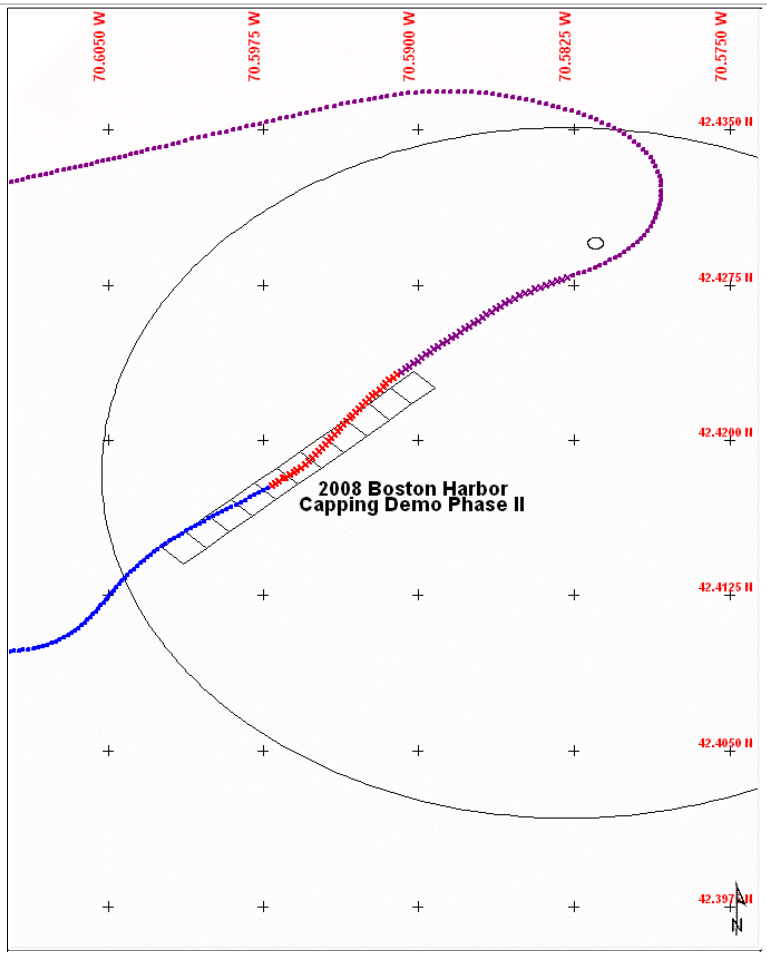
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	77				
Tug:	Lemmerhirt	**Time:**	6/22/2008 11:29:48	**Time:**	6/22/2008 11:33:23
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.417789	**Lat:**	42.423189
Type:	Split Hull Scow	**Long:**	-70.597070	**Long:**	-70.591005
Technique:	Bottom Dump				
Bin Volume:	5600 cu yd				
Start Time:	6/22/2008 08:09:03				
Init Aft Draft:	21.03 ft	**Aft Draft:**	21.03 ft	**Aft Draft:**	9.44 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/22/2008 7:46:00 AM (Local)

Wave Height: 1.3 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit

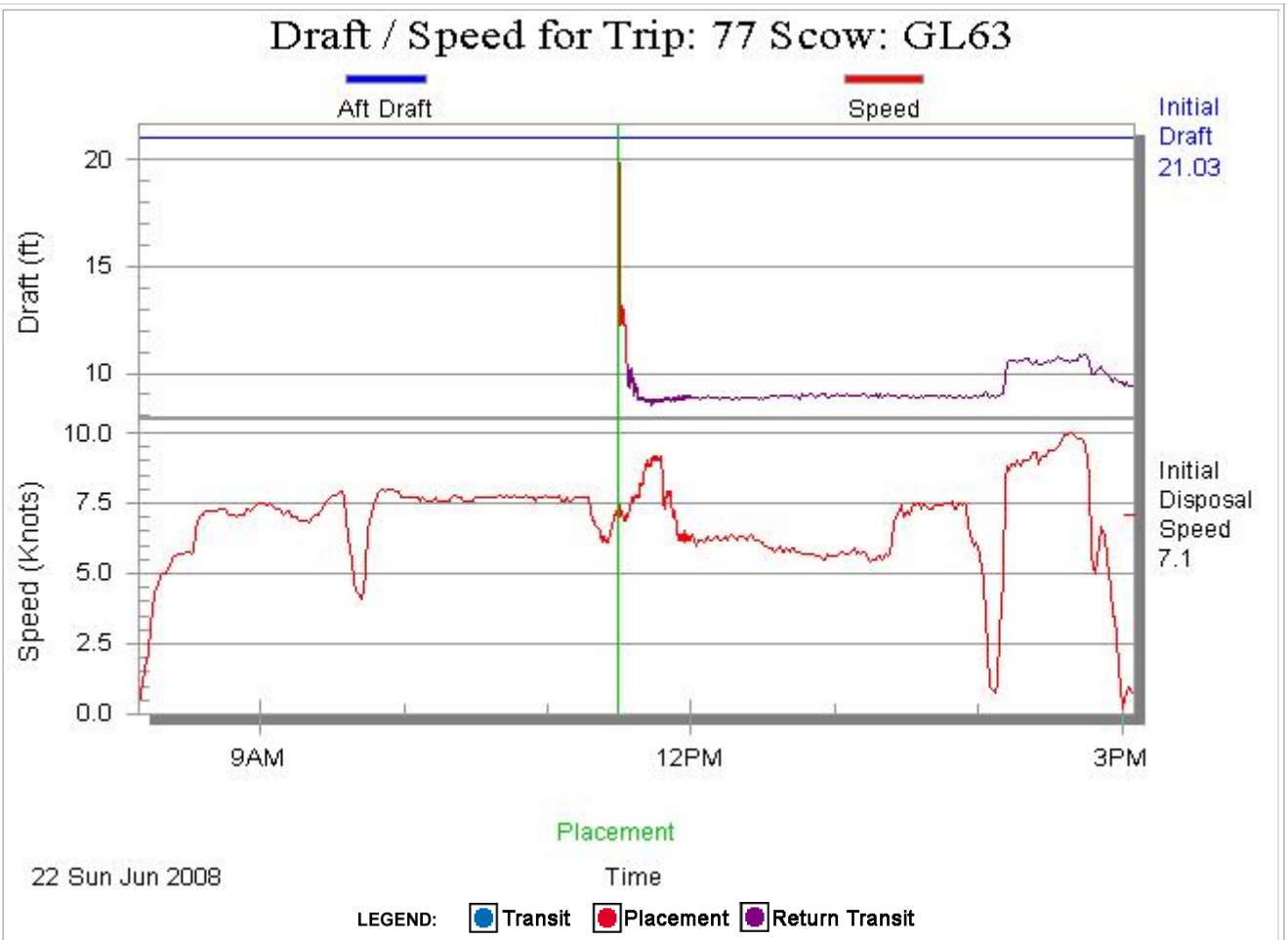
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062308_162322

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	77
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/22/2008 08:09:03
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/22/2008 11:29:48
Latitude:	42.417789
Longitude:	-70.597070
Aft Draft:	21.03 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/22/2008 11:33:23
Latitude:	42.423189
Longitude:	-70.591005
Aft Draft:	9.44 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062308_162322

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

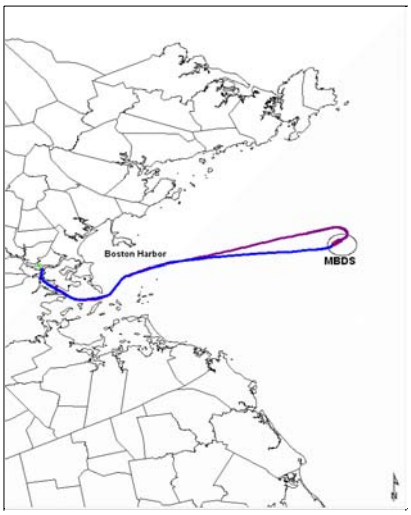
SAIC From Science to Solutions™

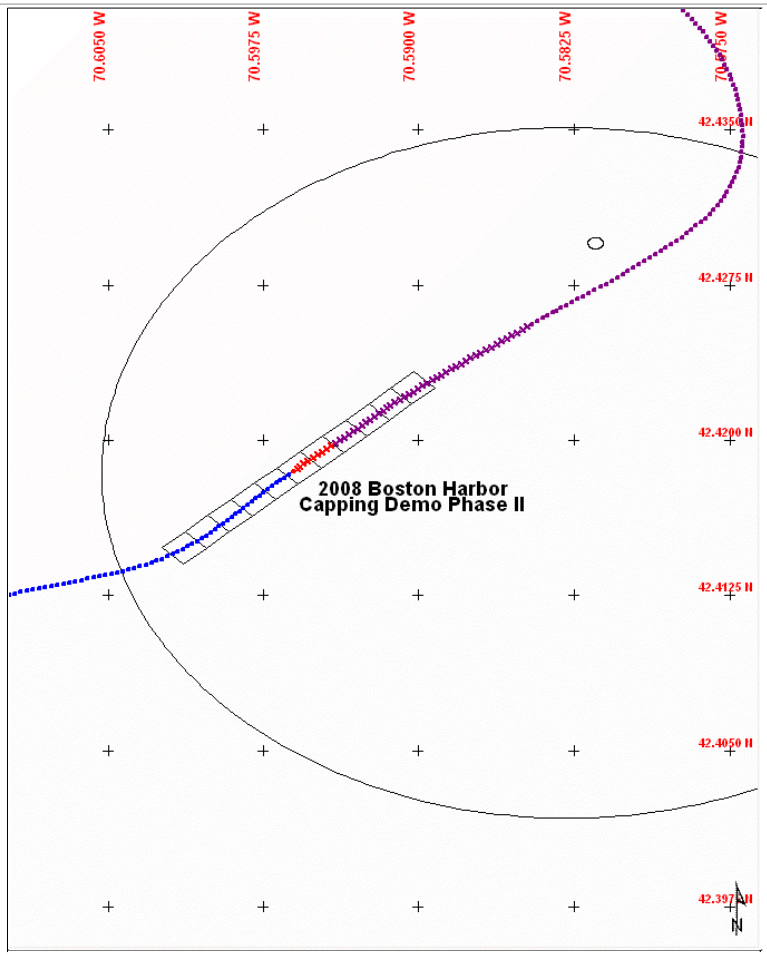
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	78				
Tug:	Lemmerhirt	**Time:**	6/23/2008 00:37:44	**Time:**	6/23/2008 00:38:35
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.418505	**Lat:**	42.419743
Type:	Split Hull Scow	**Long:**	-70.596072	**Long:**	-70.594256
Technique:	Bottom Dump				
Bin Volume:	5700 cu yd				
Start Time:	6/22/2008 21:12:44				
Init Aft Draft:	18.70 ft	**Aft Draft:**	17.07 ft	**Aft Draft:**	4.89 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/22/2008 8:44:00 PM (Local)

Wave Height: 2.0 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013



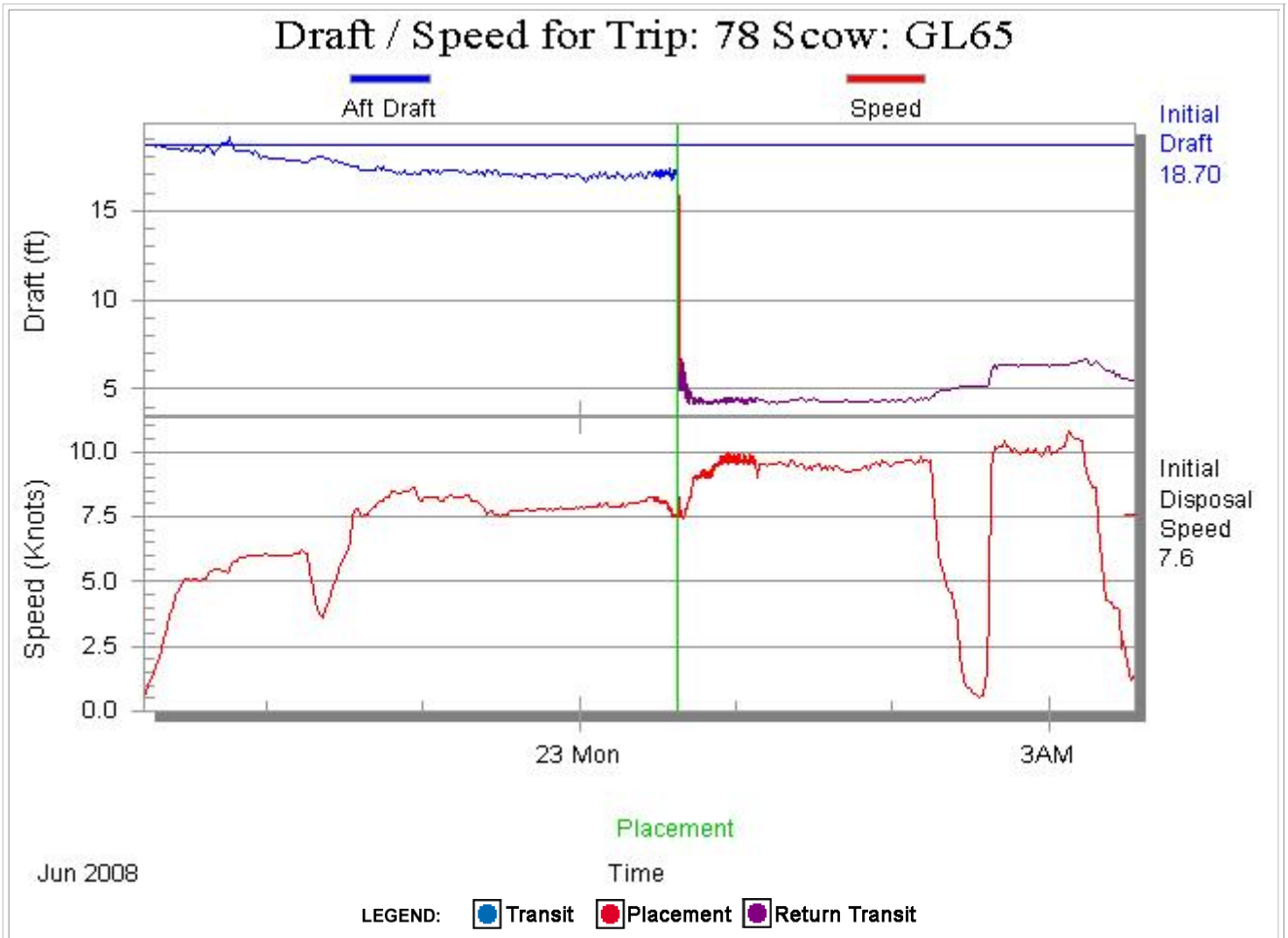


Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062408_114959

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	78
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/22/2008 21:12:44
Init Aft Draft:	18.70 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/23/2008 00:37:44
Latitude:	42.418505
Longitude:	-70.596072
Aft Draft:	17.07 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/23/2008 00:38:35
Latitude:	42.419743
Longitude:	-70.594256
Aft Draft:	4.89 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062408_114959

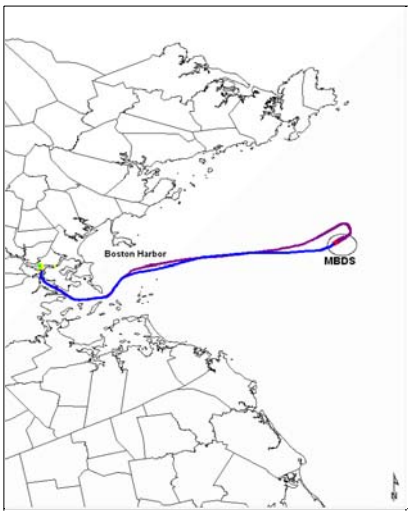
2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

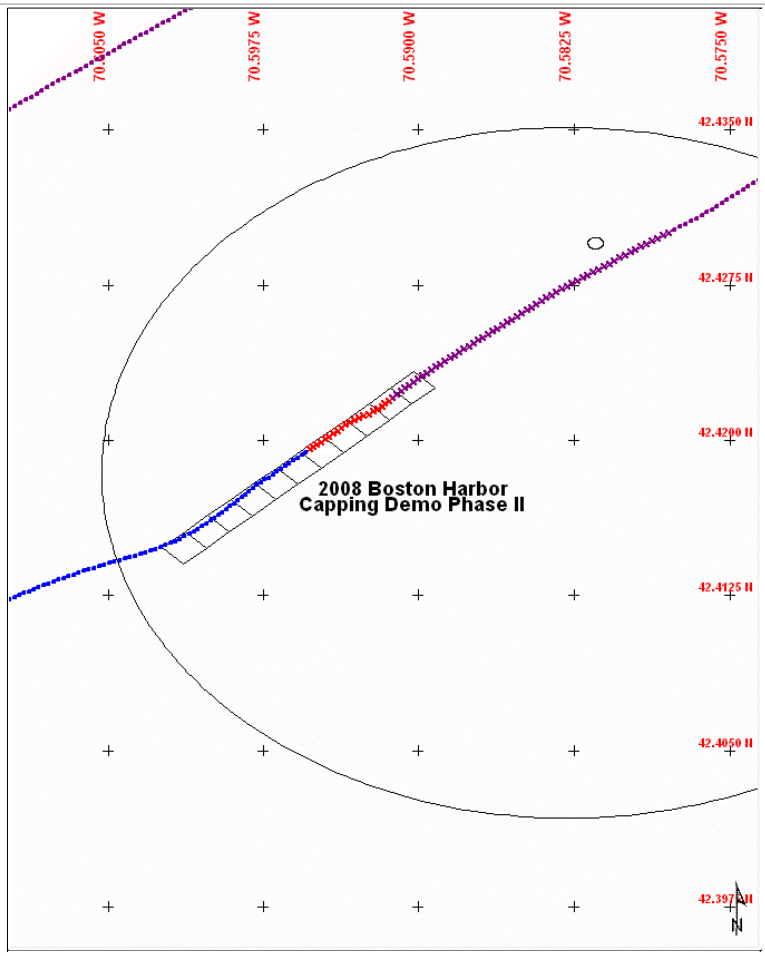
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	79				
Tug:	Lemmerhirt	**Time:**	6/23/2008 14:26:48	**Time:**	6/23/2008 14:28:39
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.419588	**Lat:**	42.421930
Type:	Split Hull Scow	**Long:**	-70.595249	**Long:**	-70.591416
Technique:	Bottom Dump				
Bin Volume:	5750 cu yd				
Start Time:	6/23/2008 10:54:02				
Init Aft Draft:	21.03 ft	**Aft Draft:**	21.03 ft	**Aft Draft:**	10.79 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/23/2008 10:39:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062408_120500

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	79
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5750 cu yd
Start Time:	6/23/2008 10:54:02
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	6/23/2008 14:26:48
Latitude:	42.419588
Longitude:	-70.595249
Aft Draft:	21.03 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	6/23/2008 14:28:39
Latitude:	42.421930
Longitude:	-70.591416
Aft Draft:	10.79 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062408_120500

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	80
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/23/2008 23:40:59
Init Aft Draft:	19.58 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

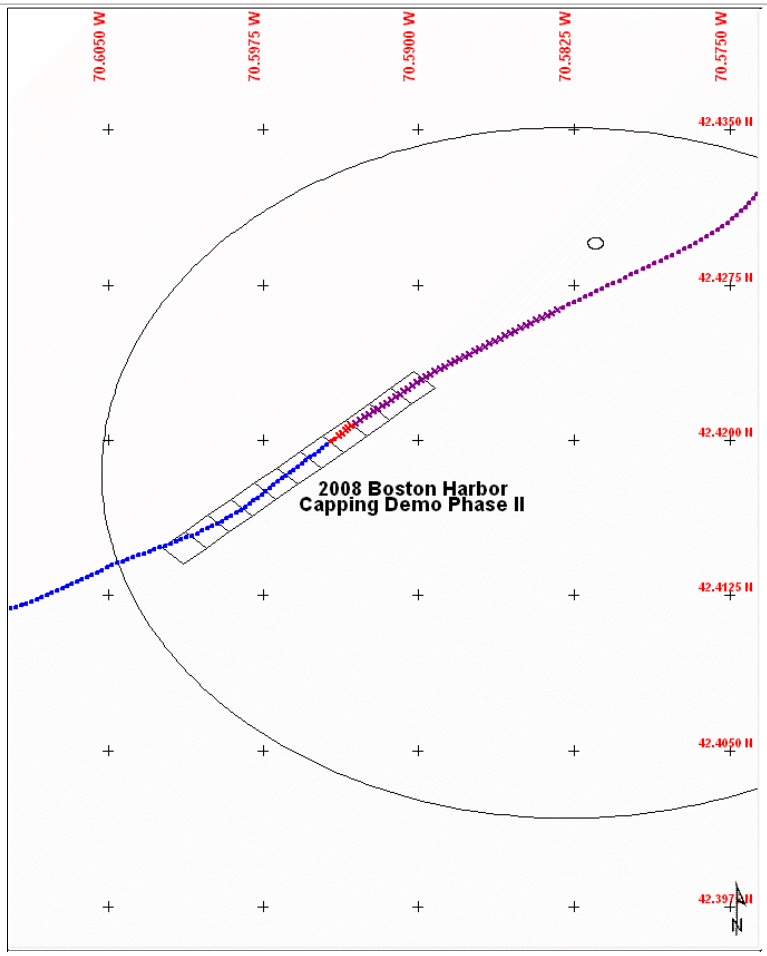
	Placement Start:	Placement End:
Time:	6/24/2008 03:23:37	6/24/2008 03:24:06
Lat:	42.419952	42.420706
Long:	-70.594270	-70.593283
Aft Draft:	17.96 ft	5.71 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/23/2008 11:17:00 PM (Local)

Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013



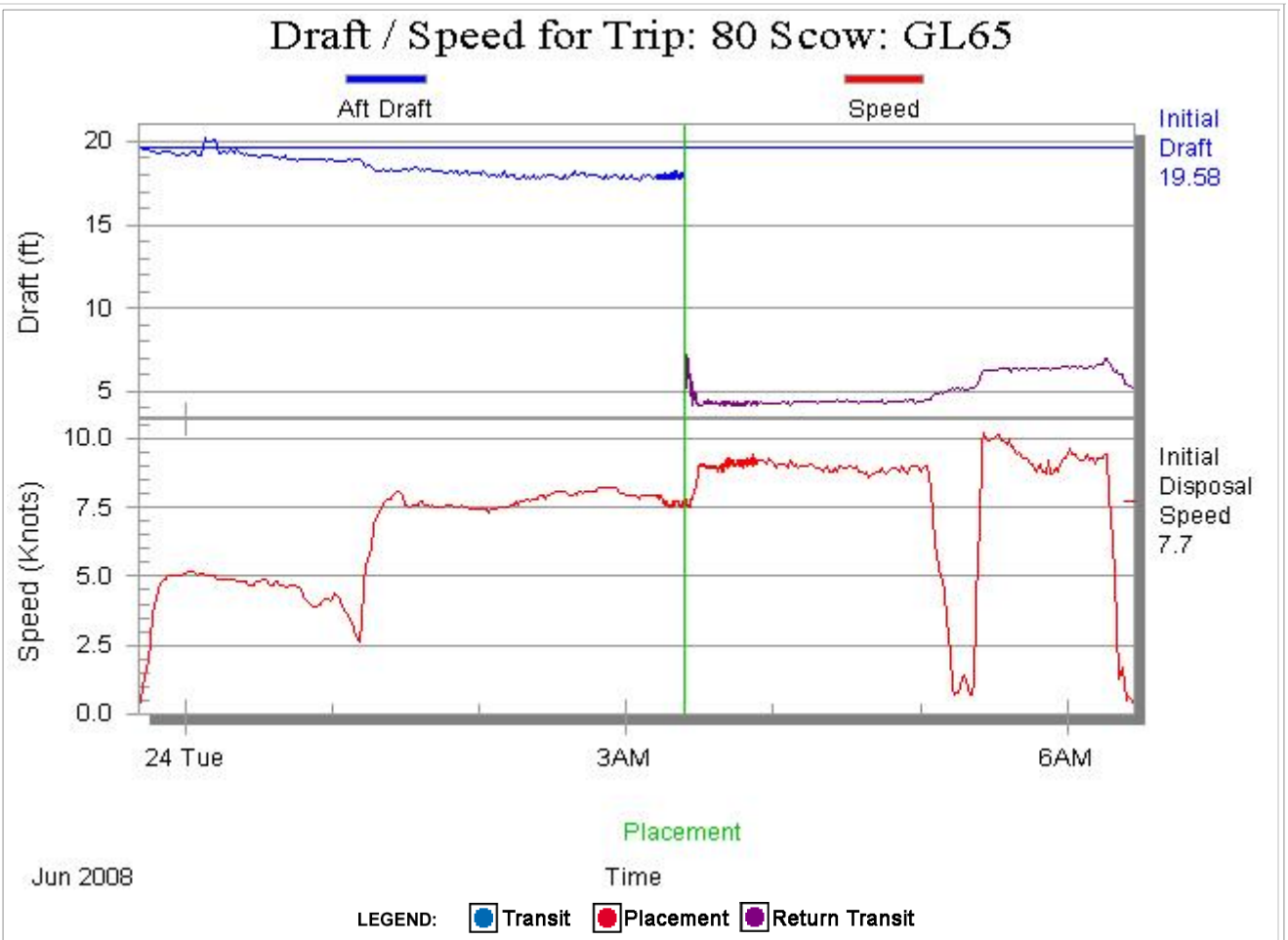


Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062408_115529

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	80
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/23/2008 23:40:59
Init Aft Draft:	19.58 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	6/24/2008 03:23:37	**Time:**	6/24/2008 03:24:06
Latitude:	42.419952	**Latitude:**	42.420706
Longitude:	-70.594270	**Longitude:**	-70.593283
Aft Draft:	17.96 ft	**Aft Draft:**	5.71 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062408_115529

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

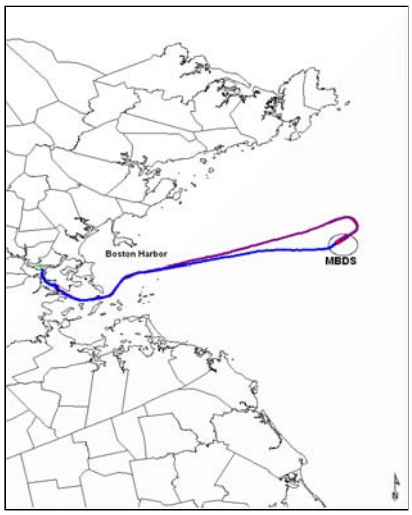
Trip Information:

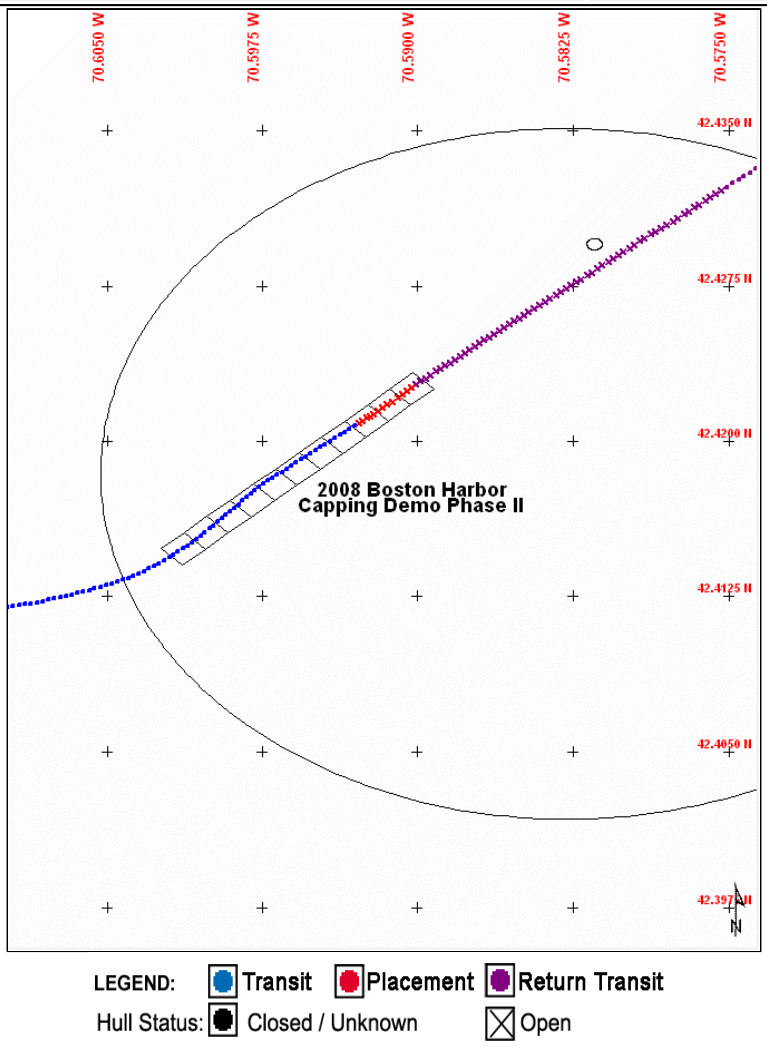
Trip #:	81
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5000 cu yd
Start Time:	6/24/2008 11:45:26
Init Aft Draft:	21.11 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/24/2008 16:24:05	**Time:**	6/24/2008 16:25:10
Lat:	42.420909	**Lat:**	42.422578
Long:	-70.592830	**Long:**	-70.590274
Aft Draft:	21.03 ft	**Aft Draft:**	10.71 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/24/2008 1:20:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013



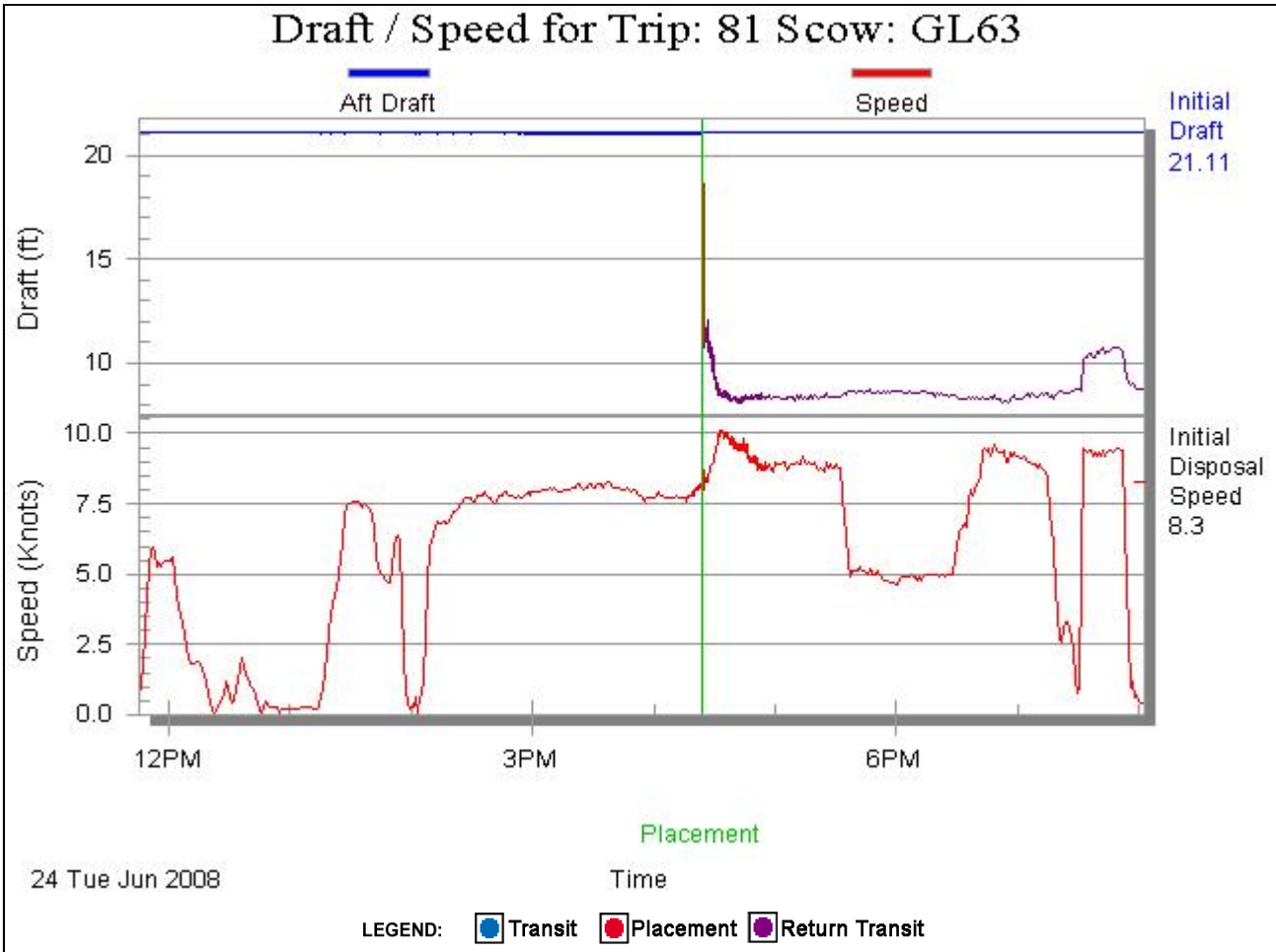


LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 062508_114706

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	81
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5000 cu yd
Start Time:	6/24/2008 11:45:26
Init Aft Draft:	21.11 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/24/2008 16:24:05	**Time:**	6/24/2008 16:25:10
Latitude:	42.420909	**Latitude:**	42.422578
Longitude:	-70.592830	**Longitude:**	-70.590274
Aft Draft:	21.03 ft	**Aft Draft:**	10.71 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062508_114706

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

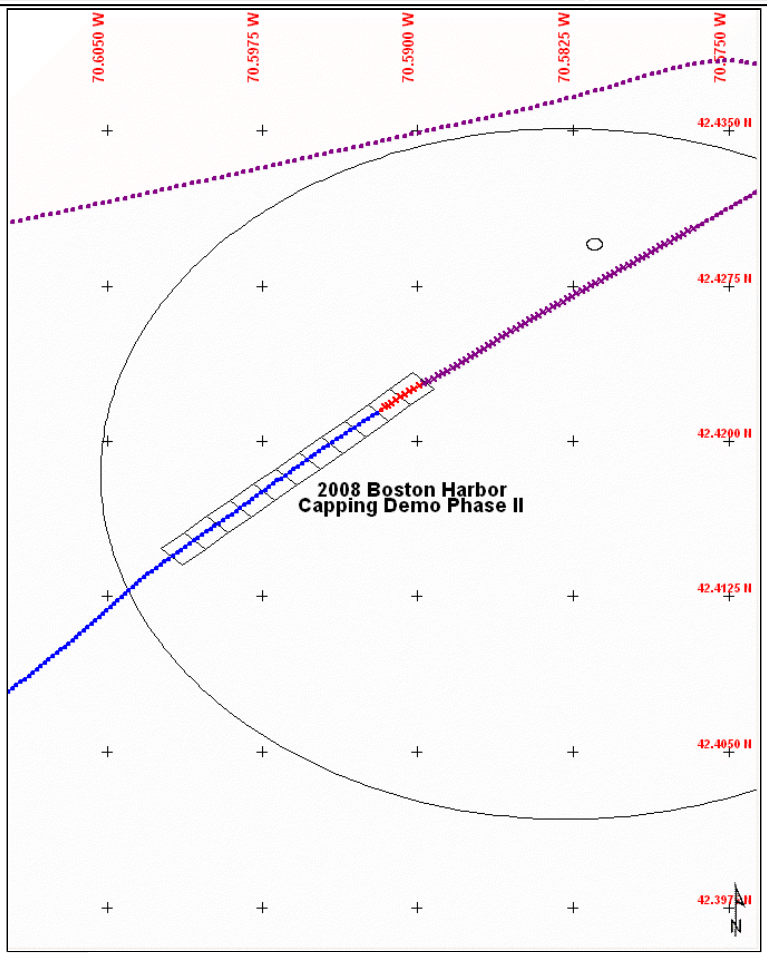
Trip #:	82
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/25/2008 02:58:07
Init Aft Draft:	19.73 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	6/25/2008 06:50:37	6/25/2008 06:51:28
Lat:	42.421531	42.422690
Long:	-70.591774	-70.589913
Aft Draft:	18.62 ft	6.08 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 6/25/2008 3:10:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013

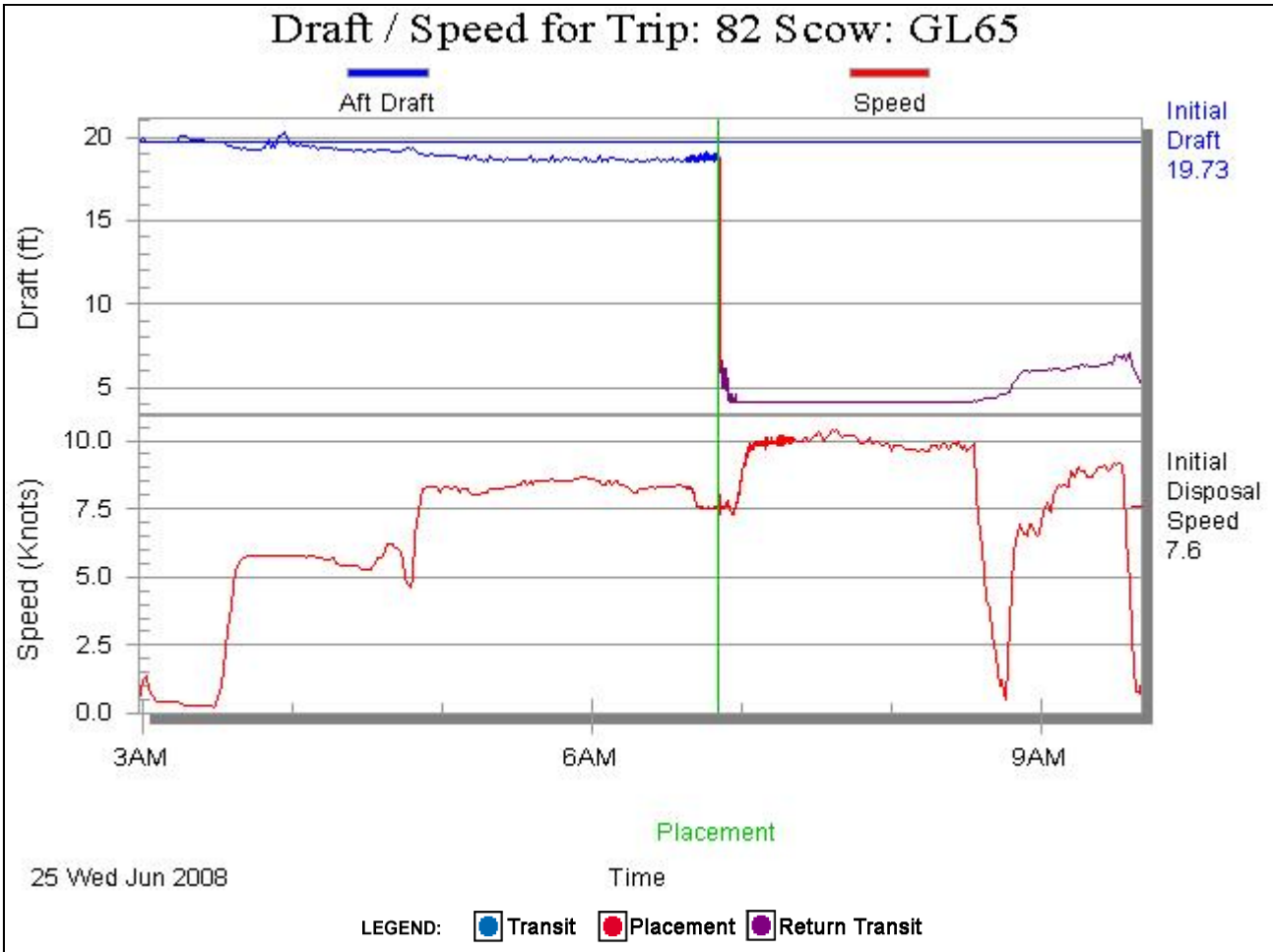


LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 062508_114239

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	82
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	6/25/2008 02:58:07
Init Aft Draft:	19.73 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/25/2008 06:50:37	**Time:**	6/25/2008 06:51:28
Latitude:	42.421531	**Latitude:**	42.422690
Longitude:	-70.591774	**Longitude:**	-70.589913
Aft Draft:	18.62 ft	**Aft Draft:**	6.08 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062508_114239

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	83
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/25/2008 14:25:33
Init Aft Draft:	21.19 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

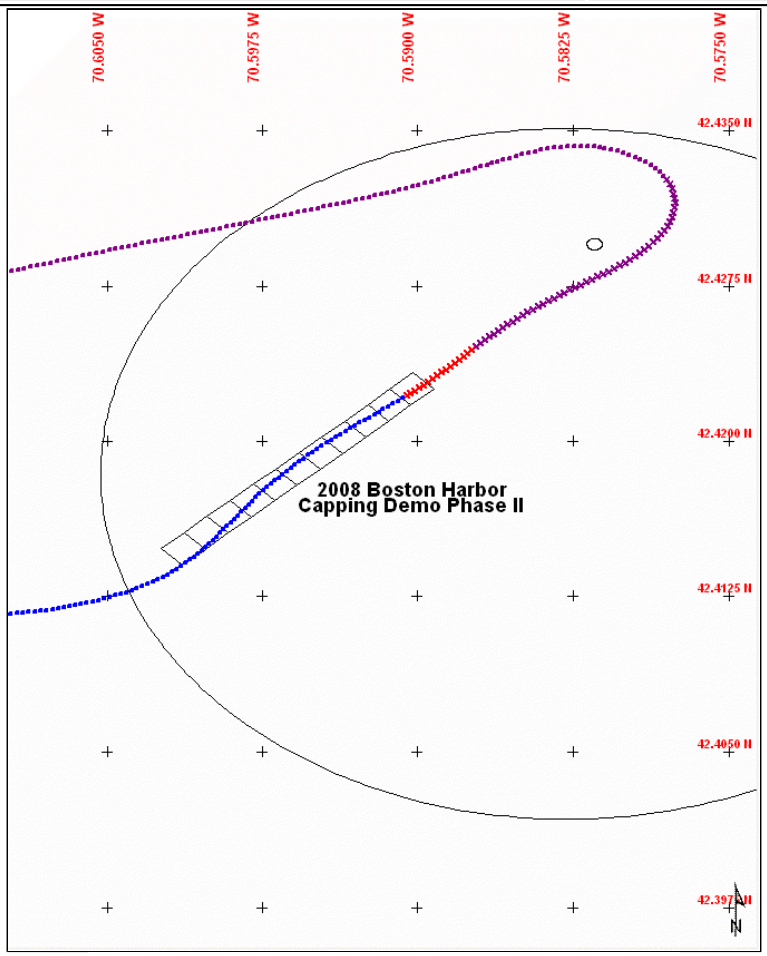
	Placement Start:	Placement End:
Time:	6/25/2008 18:11:53	6/25/2008 18:13:20
Lat:	42.422240	42.424417
Long:	-70.590469	-70.587367
Aft Draft:	21.11 ft	12.54 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/25/2008 2:16:00 PM (Local)

Wave Height: 1.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





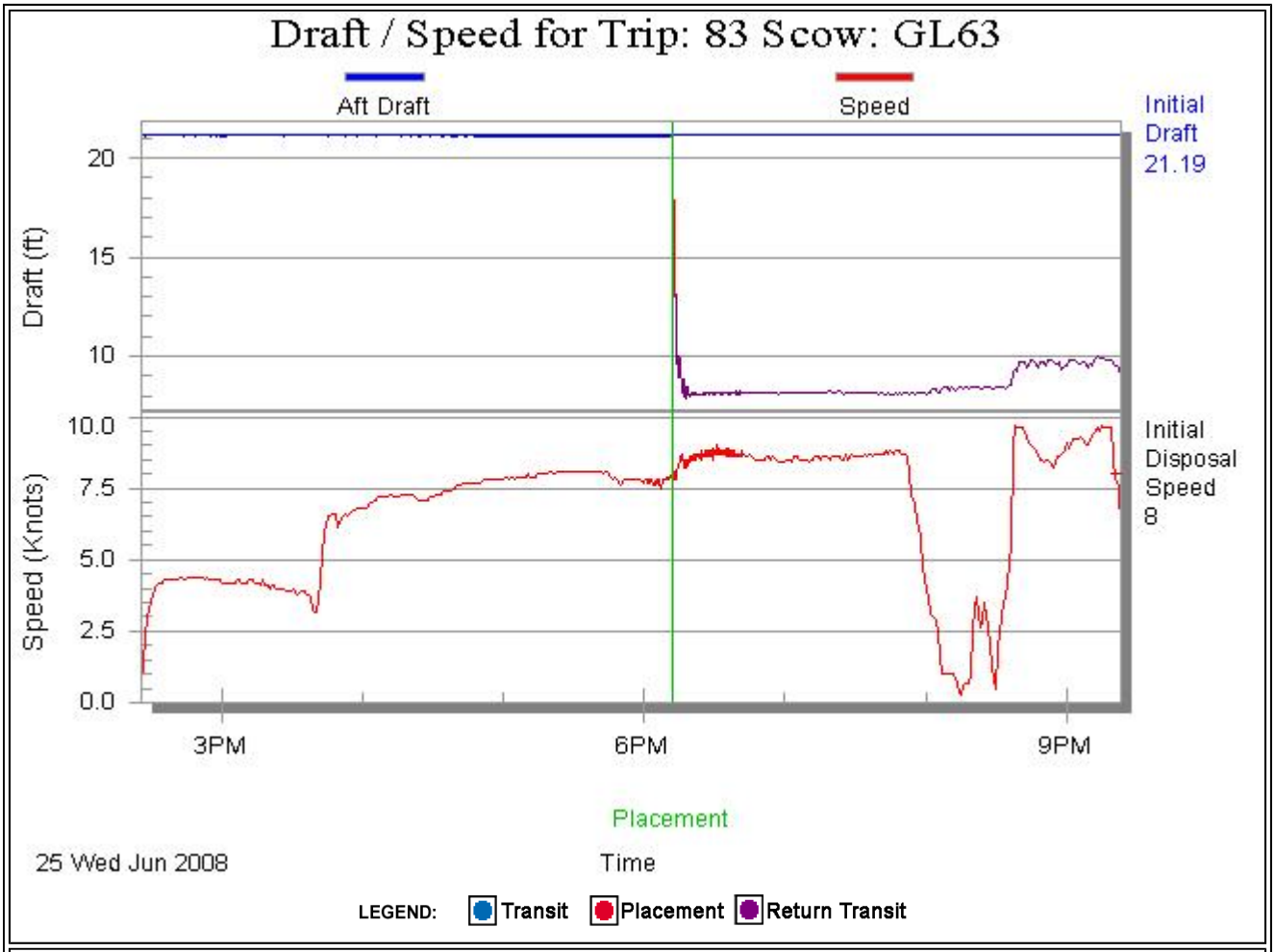
LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 062608_150525

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	83
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	6/25/2008 14:25:33
Init Aft Draft:	21.19 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/25/2008 18:11:53	**Time:**	6/25/2008 18:13:20
Latitude:	42.422240	**Latitude:**	42.424417
Longitude:	-70.590469	**Longitude:**	-70.587367
Aft Draft:	21.11 ft	**Aft Draft:**	12.54 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062608_150525

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

From Science to Solutions™

Trip Information:

Trip #:	84
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5400 cu yd
Start Time:	6/26/2008 03:44:24
Init Aft Draft:	19.44 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

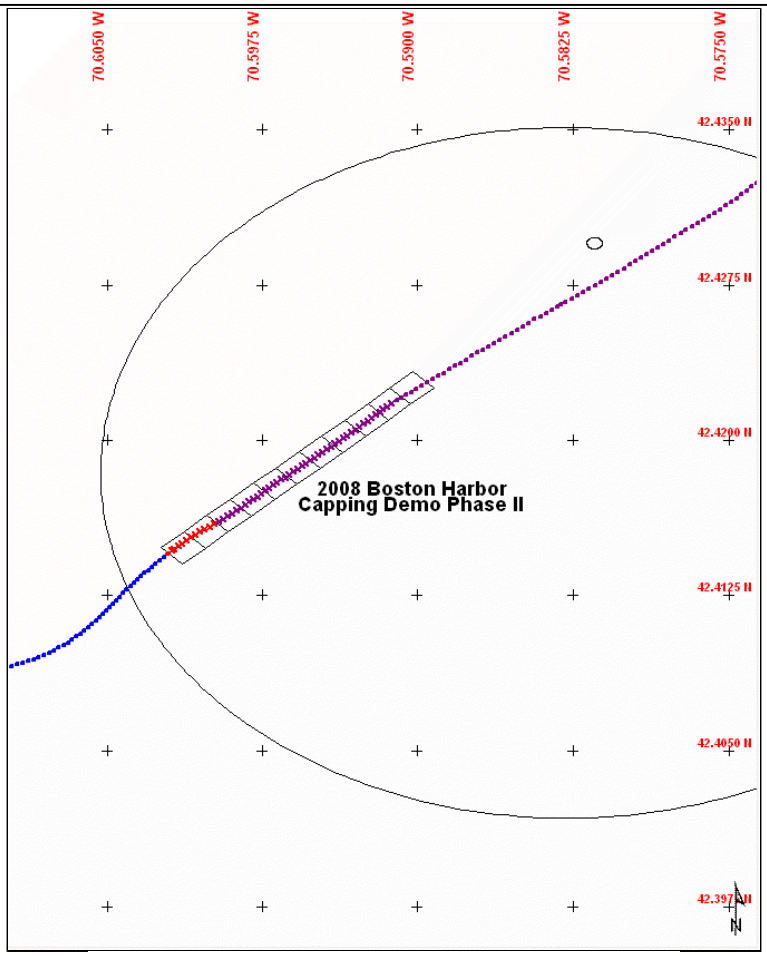
Placement Start:		**Placement End:**	
Time:	6/26/2008 14:50:24	**Time:**	6/26/2008 14:51:27
Lat:	42.414482	**Lat:**	42.415930
Long:	-70.602067	**Long:**	-70.599837
Aft Draft:	18.03 ft	**Aft Draft:**	4.16 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/26/2008 11:15:00 AM (Local)

Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013



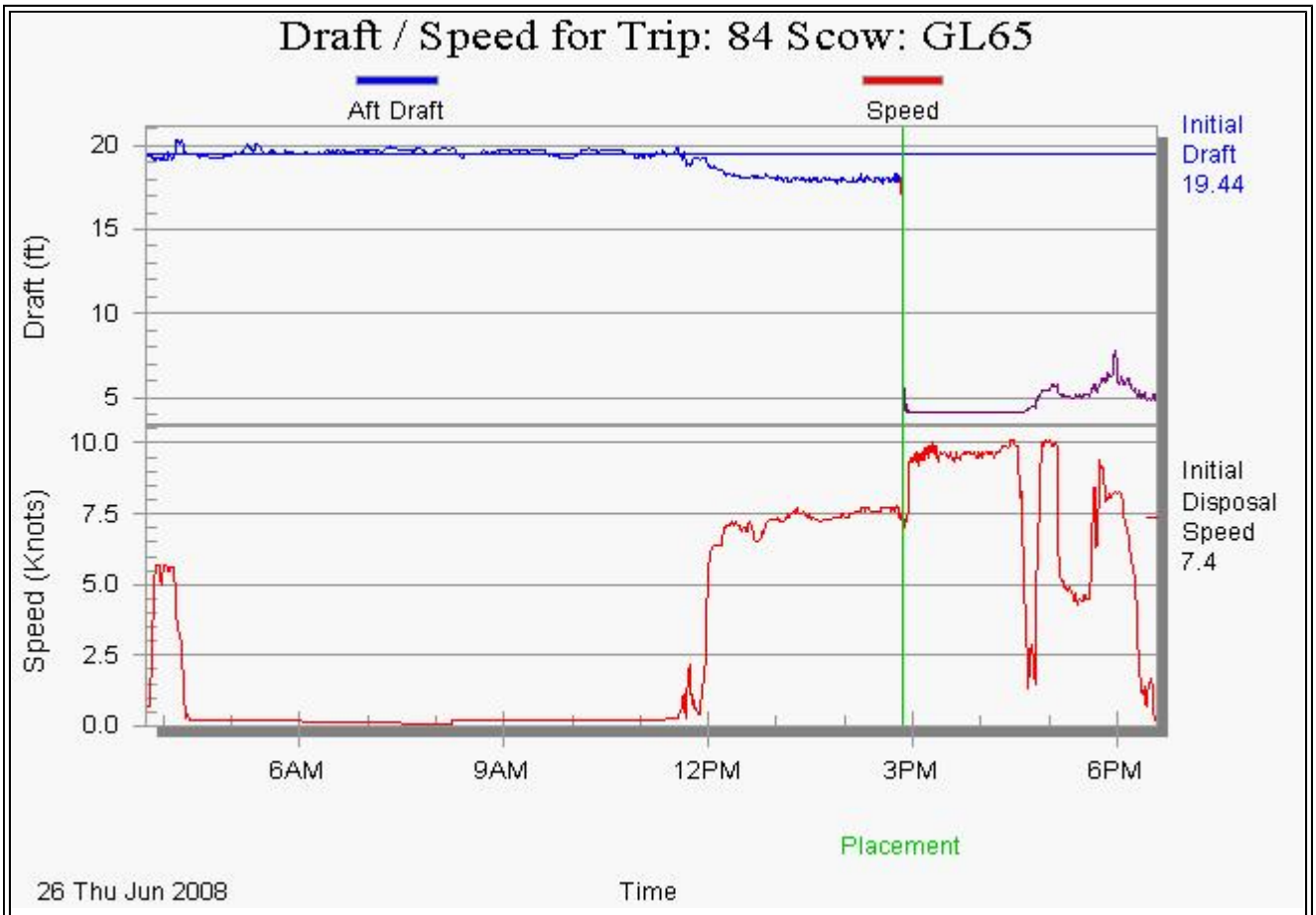


LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



LEGEND: Transit Placement Return Transit

Trip Information

Trip #:	84
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5400 cu yd
Start Time:	6/26/2008 03:44:24
Init Aft Draft:	19.44 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	6/26/2008 14:50:24	**Time:**	6/26/2008 14:51:27
Latitude:	42.414482	**Latitude:**	42.415930
Longitude:	-70.602067	**Longitude:**	-70.599837
Aft Draft:	18.03 ft	**Aft Draft:**	4.16 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062708_114658

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	85
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/26/2008 18:59:33
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

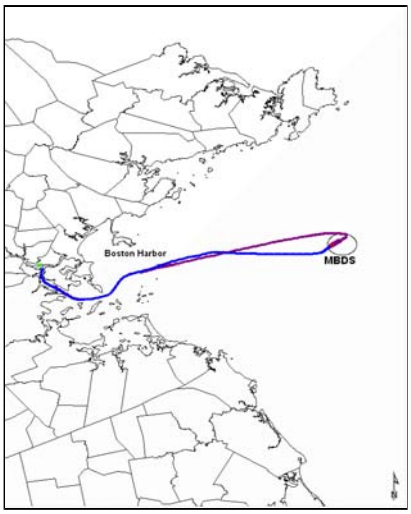
Placement Information:

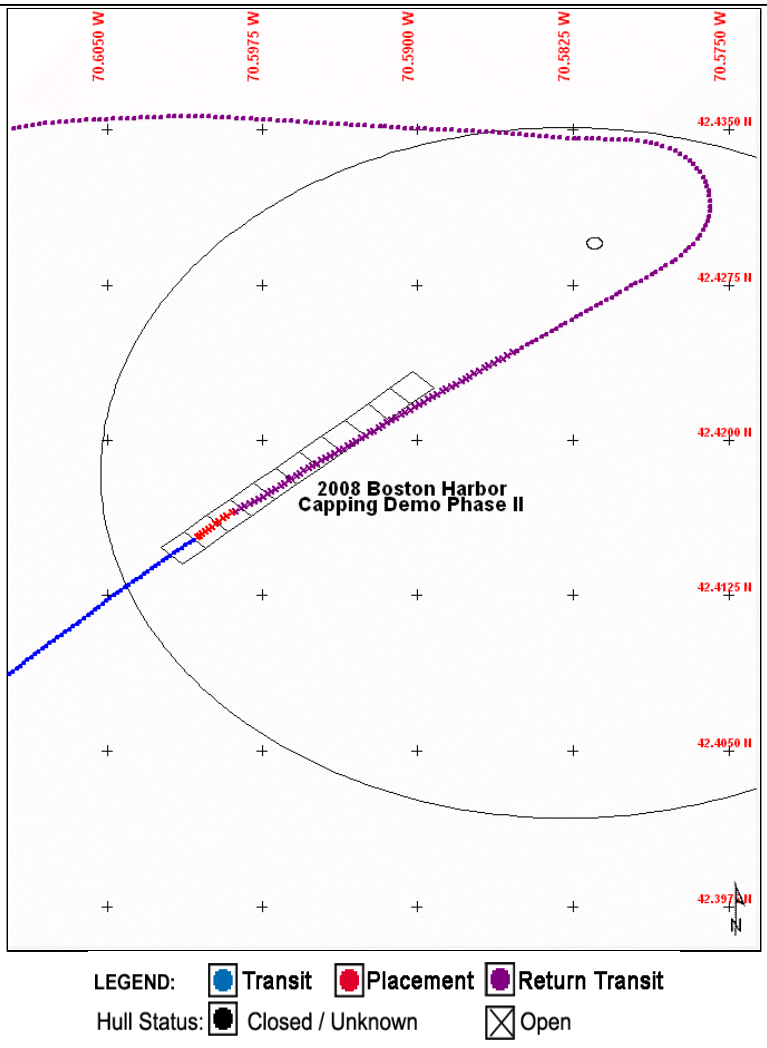
Placement Start:		**Placement End:**	
Time:	6/26/2008 22:08:17	**Time:**	6/26/2008 22:09:10
Lat:	42.415279	**Lat:**	42.416456
Long:	-70.600647	**Long:**	-70.598977
Aft Draft:	21.03 ft	**Aft Draft:**	10.87 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/26/2008 6:50:00 PM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



LEGEND: Transit Placement Return Transit

Trip Information

Trip #:	85
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/26/2008 18:59:33
Init Aft Draft:	21.03 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	6/26/2008 22:08:17	**Time:**	6/26/2008 22:09:10
Latitude:	42.415279	**Latitude:**	42.416456
Longitude:	-70.600647	**Longitude:**	-70.598977
Aft Draft:	21.03 ft	**Aft Draft:**	10.87 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062708_120622

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

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Trip Information:

Trip #:	86
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/27/2008 04:52:42
Init Aft Draft:	18.92 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

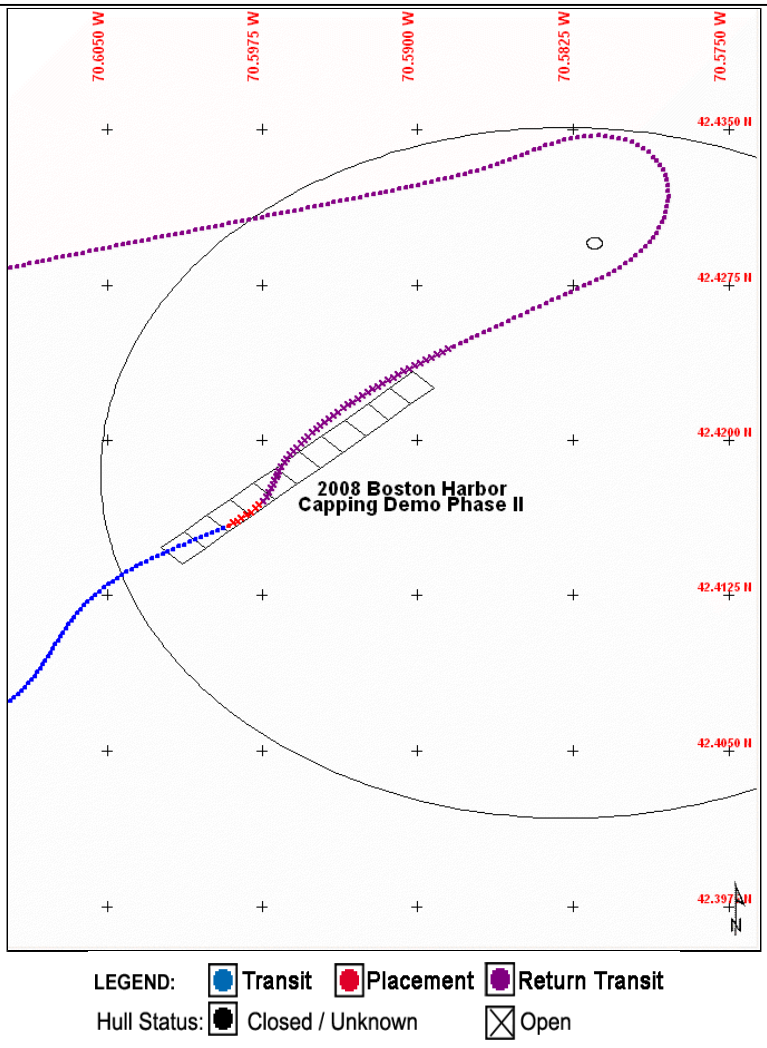
Placement Start:		**Placement End:**	
Time:	6/27/2008 07:57:54	**Time:**	6/27/2008 07:58:33
Lat:	42.415842	**Lat:**	42.416853
Long:	-70.599135	**Long:**	-70.597652
Aft Draft:	17.52 ft	**Aft Draft:**	4.38 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 6/27/2008 4:41:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



LEGEND: Transit Placement Return Transit

Trip Information

Trip #:	86
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	6/27/2008 04:52:42
Init Aft Draft:	18.92 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	6/27/2008 07:57:54	**Time:**	6/27/2008 07:58:33
Latitude:	42.415842	**Latitude:**	42.416853
Longitude:	-70.599135	**Longitude:**	-70.597652
Aft Draft:	17.52 ft	**Aft Draft:**	4.38 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 062708_121424

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

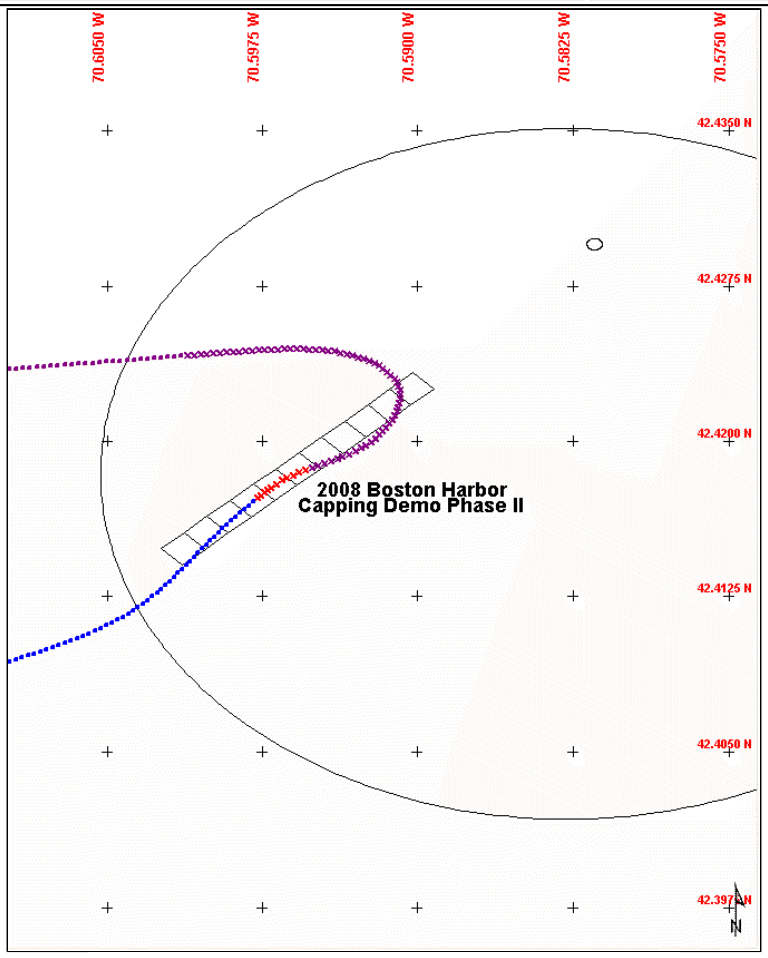
Trip #:	87
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5770 cu yd
Start Time:	7/7/2008 18:26:43
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/7/2008 21:22:24	**Time:**	7/7/2008 21:23:17
Lat:	42.417235	**Lat:**	42.418631
Long:	-70.597744	**Long:**	-70.595436
Aft Draft:	18.61 ft	**Aft Draft:**	8.61 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/7/2008 6:26:00 PM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





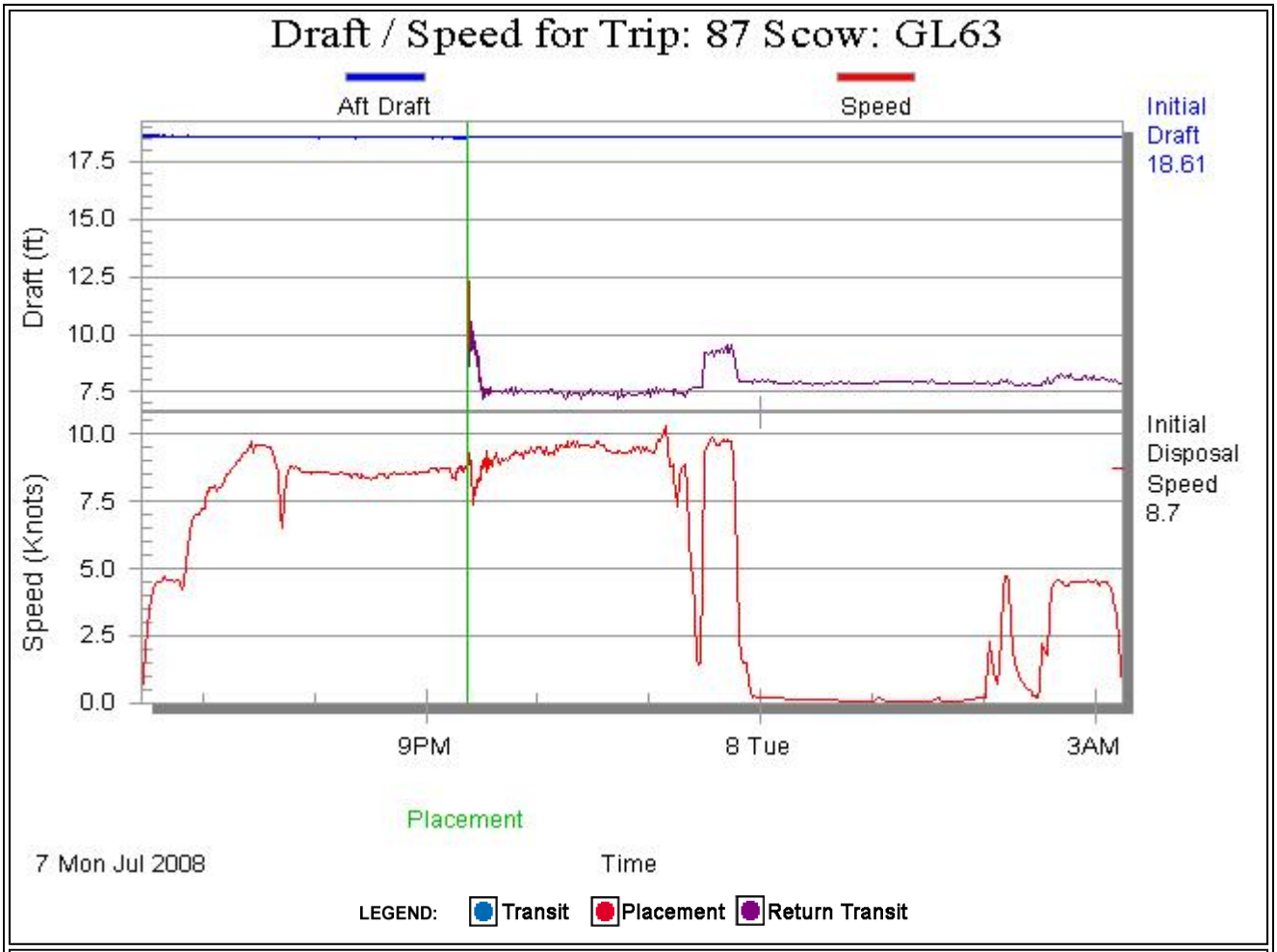
Notes:

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 070808_110419

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
From Science to Solutions™



Trip Information

Trip #:	87
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5770 cu yd
Start Time:	7/7/2008 18:26:43
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/7/2008 21:22:24
Latitude:	42.417235
Longitude:	-70.597744
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/7/2008 21:23:17
Latitude:	42.418631
Longitude:	-70.595436
Aft Draft:	8.61 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 070808_110419

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

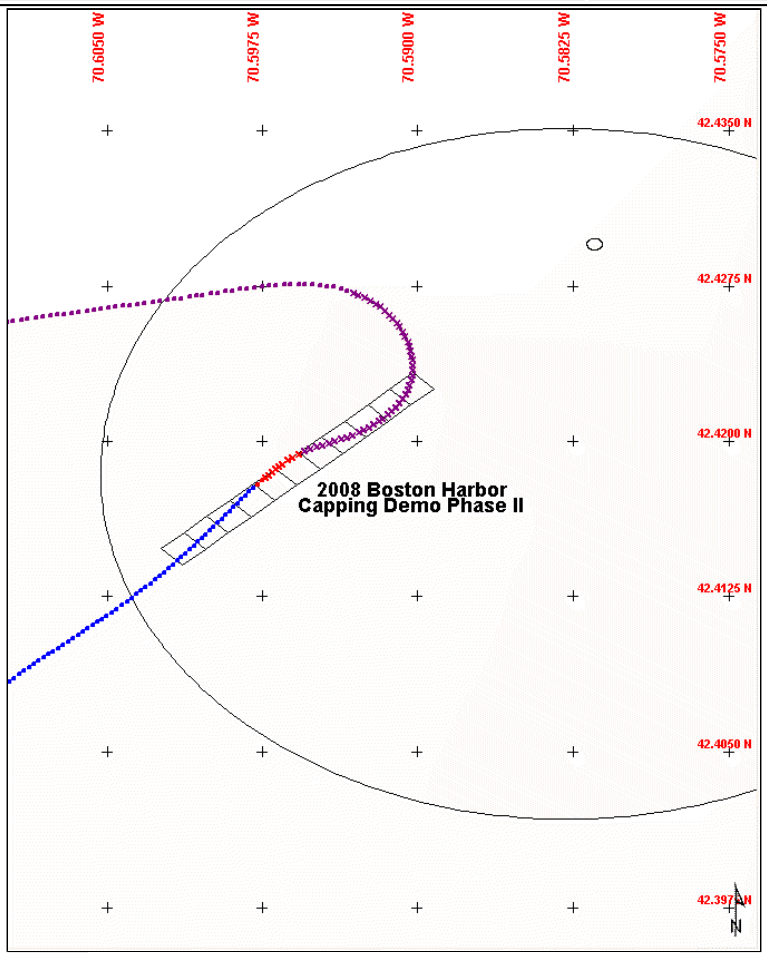
Trip #:	88
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5860 cu yd
Start Time:	7/8/2008 05:08:07
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/8/2008 08:07:49	**Time:**	7/8/2008 08:08:42
Lat:	42.417899	**Lat:**	42.419401
Long:	-70.597743	**Long:**	-70.595751
Aft Draft:	19.81 ft	**Aft Draft:**	4.89 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/8/2008 5:01:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 17.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 070808_114058

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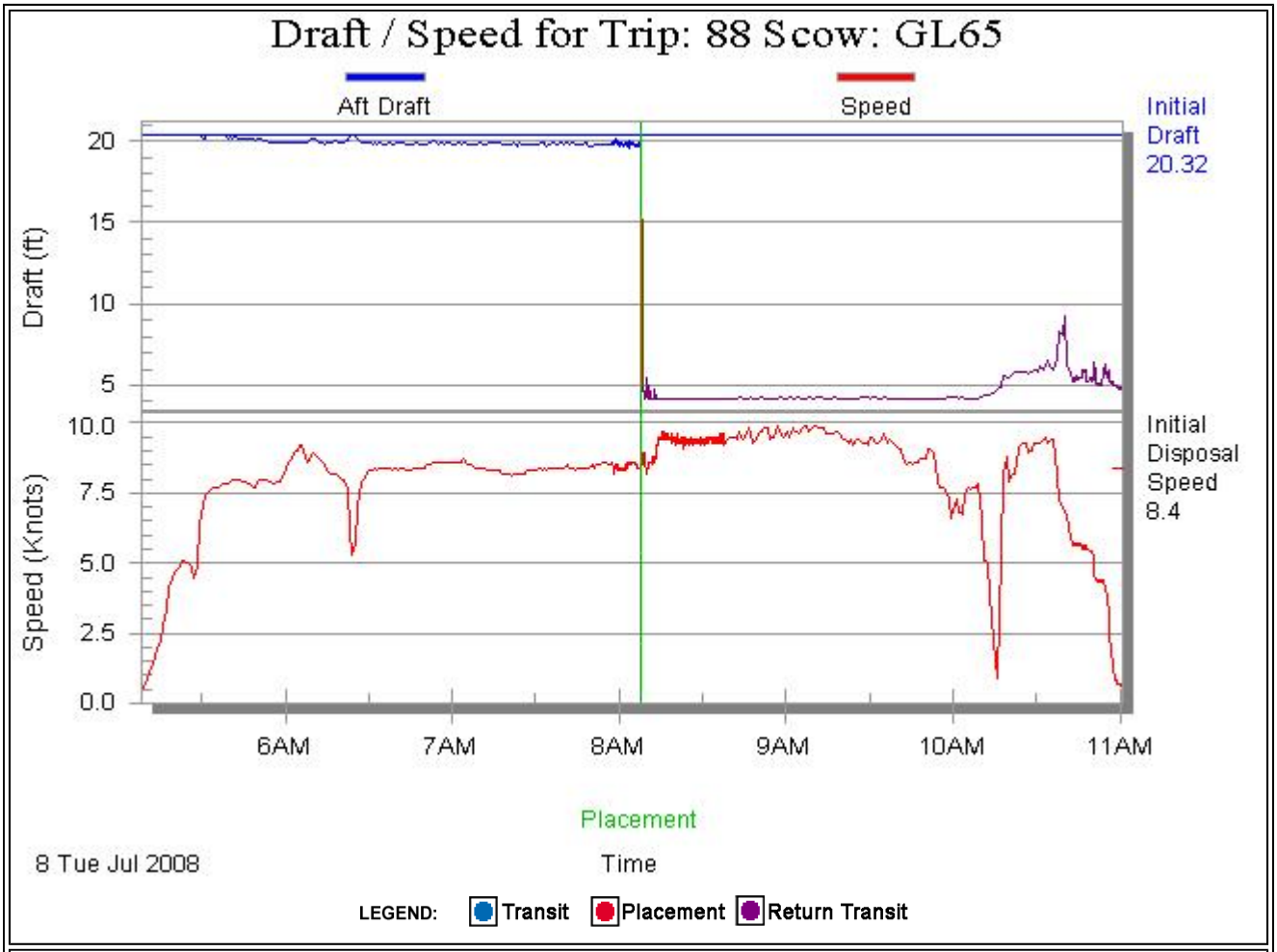


Trip Information

Trip #:	88
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5860 cu yd
Start Time:	7/8/2008 05:08:07
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/8/2008 08:07:49
Latitude:	42.417899
Longitude:	-70.597743
Aft Draft:	19.81 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/8/2008 08:08:42
Latitude:	42.419401
Longitude:	-70.595751
Aft Draft:	4.89 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 070808_114058

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

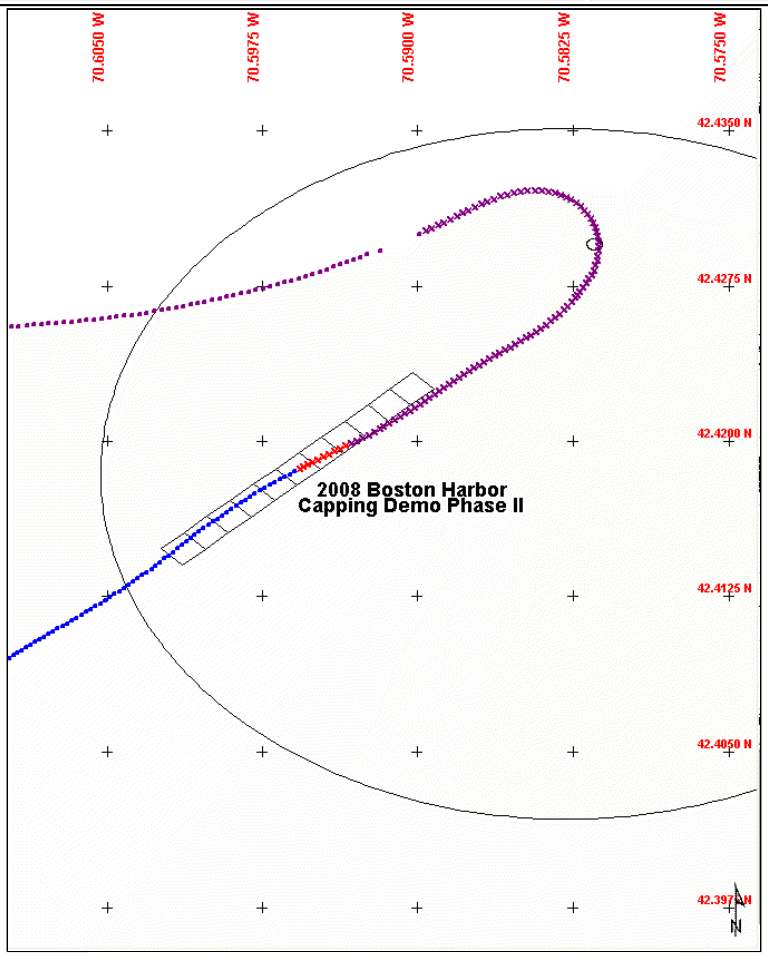
Trip #:	89
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5580 cu yd
Start Time:	7/8/2008 11:52:44
Init Aft Draft:	18.69 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/8/2008 15:11:48	**Time:**	7/8/2008 15:12:39
Lat:	42.418678	**Lat:**	42.419786
Long:	-70.595696	**Long:**	-70.593474
Aft Draft:	18.69 ft	**Aft Draft:**	9.17 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/8/2008 11:46:00 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 17.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 070908_142317

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W912WJ-07-C-0023

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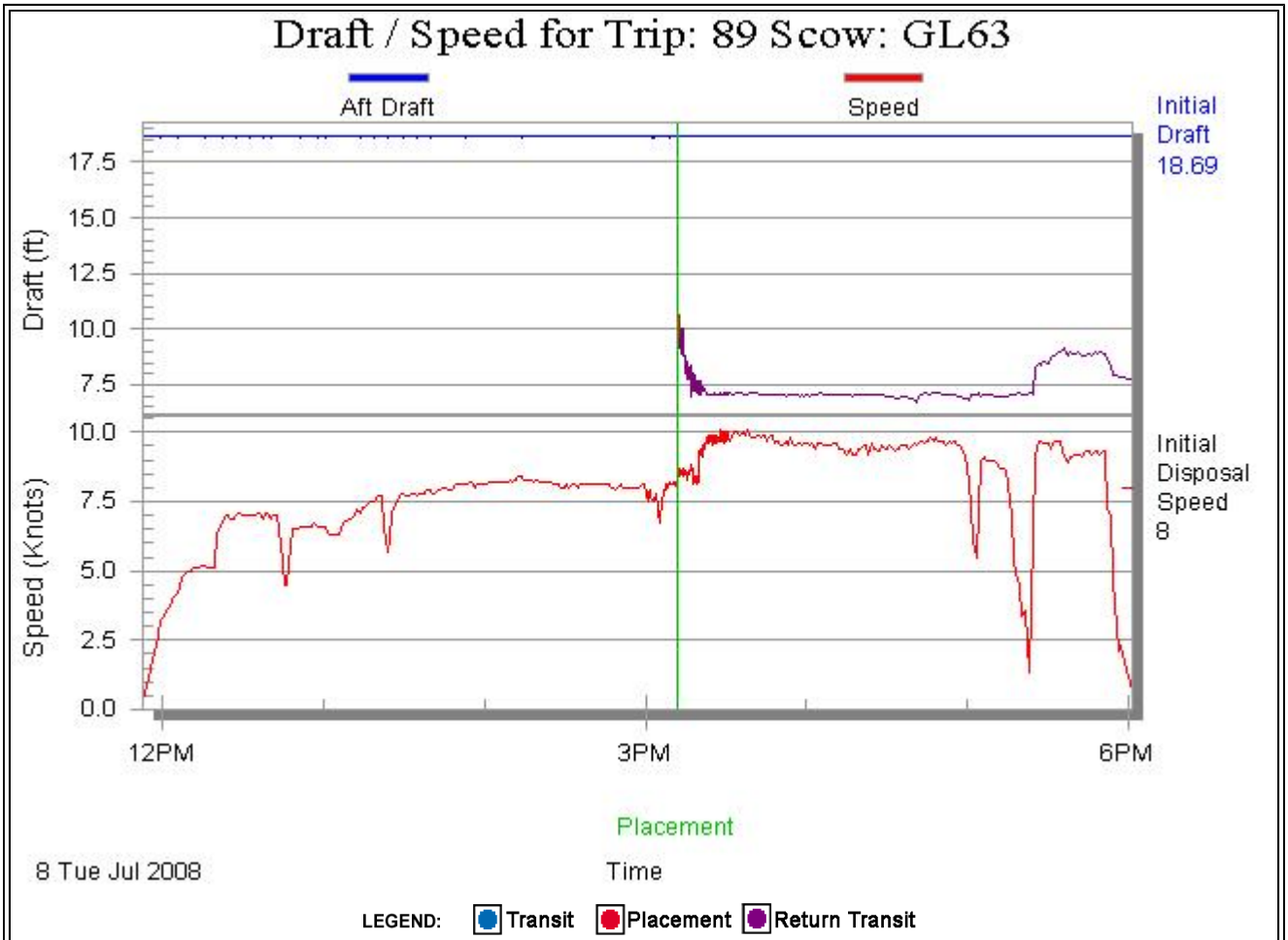


Trip Information

Trip #:	89
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5580 cu yd
Start Time:	7/8/2008 11:52:44
Init Aft Draft:	18.69 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/8/2008 15:11:48
Latitude:	42.418678
Longitude:	-70.595696
Aft Draft:	18.69 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/8/2008 15:12:39
Latitude:	42.419786
Longitude:	-70.593474
Aft Draft:	9.17 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 070908_142317

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

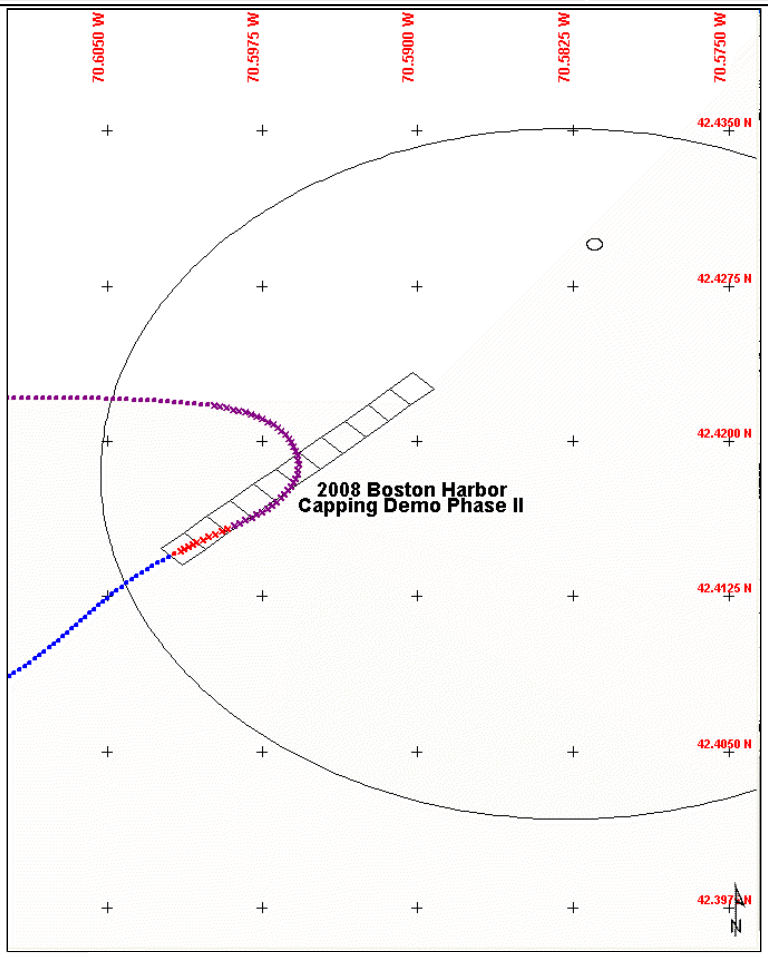
Trip #:	90
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5590 cu yd
Start Time:	7/8/2008 18:32:30
Init Aft Draft:	19.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/8/2008 21:35:12	**Time:**	7/8/2008 21:36:05
Lat:	42.414534	**Lat:**	42.415736
Long:	-70.601744	**Long:**	-70.599171
Aft Draft:	18.77 ft	**Aft Draft:**	4.53 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/8/2008 6:31:00 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 070908_142148

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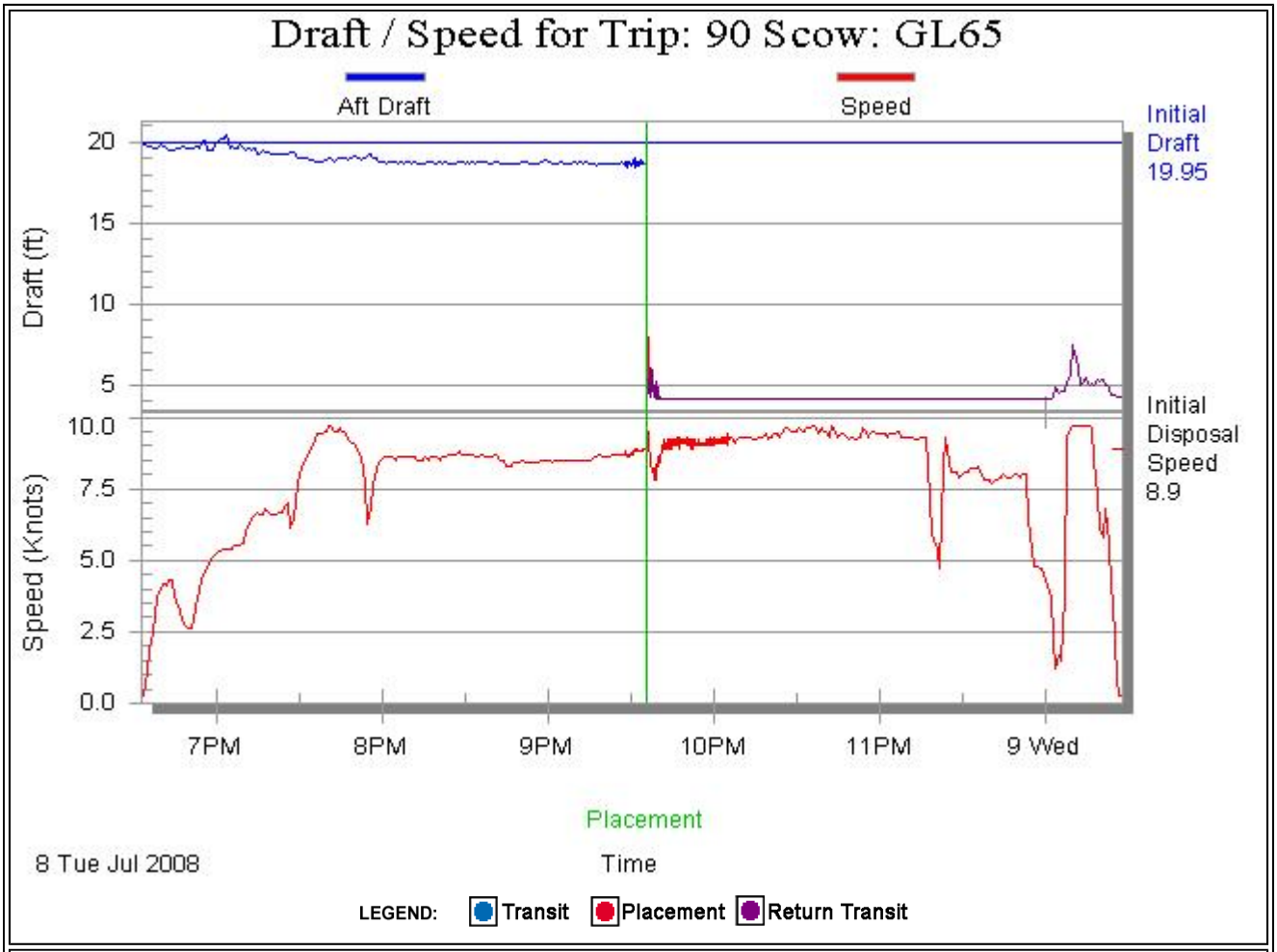


Trip Information

Trip #:	90
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5590 cu yd
Start Time:	7/8/2008 18:32:30
Init Aft Draft:	19.95 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/8/2008 21:35:12
Latitude:	42.414534
Longitude:	-70.601744
Aft Draft:	18.77 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/8/2008 21:36:05
Latitude:	42.415736
Longitude:	-70.599171
Aft Draft:	4.53 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 070908_142148

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

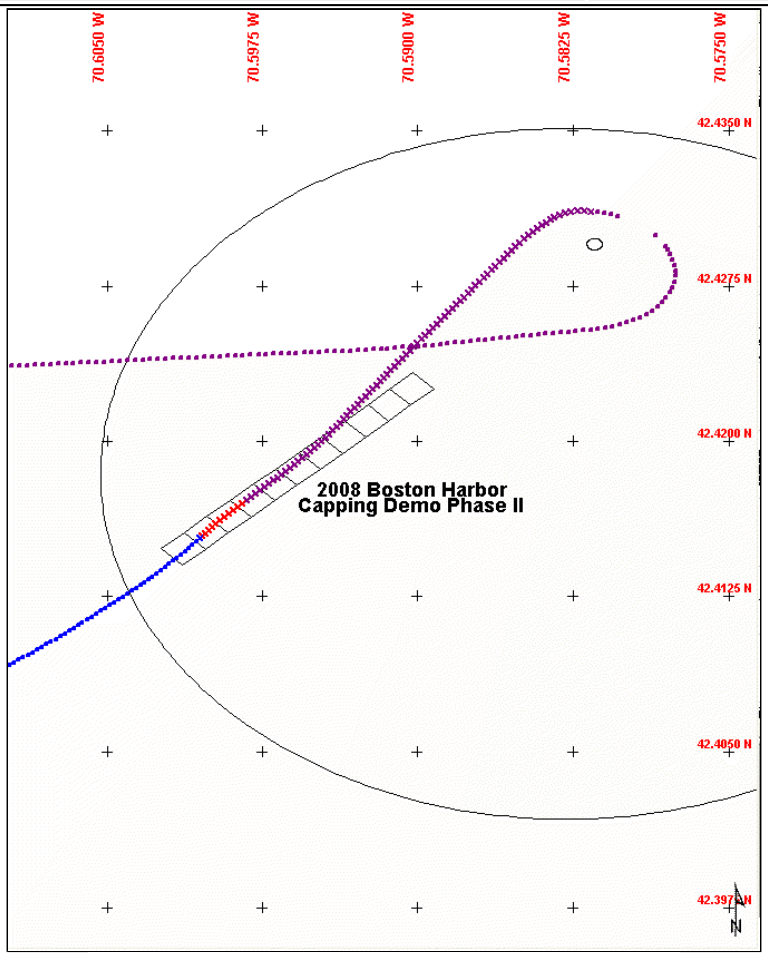
Trip #:	91
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5870 cu yd
Start Time:	7/9/2008 00:48:14
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/9/2008 04:00:16	**Time:**	7/9/2008 04:01:15
Lat:	42.415398	**Lat:**	42.416964
Long:	-70.600418	**Long:**	-70.598488
Aft Draft:	18.53 ft	**Aft Draft:**	8.37 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/9/2008 12:51:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 17.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 070908_142814

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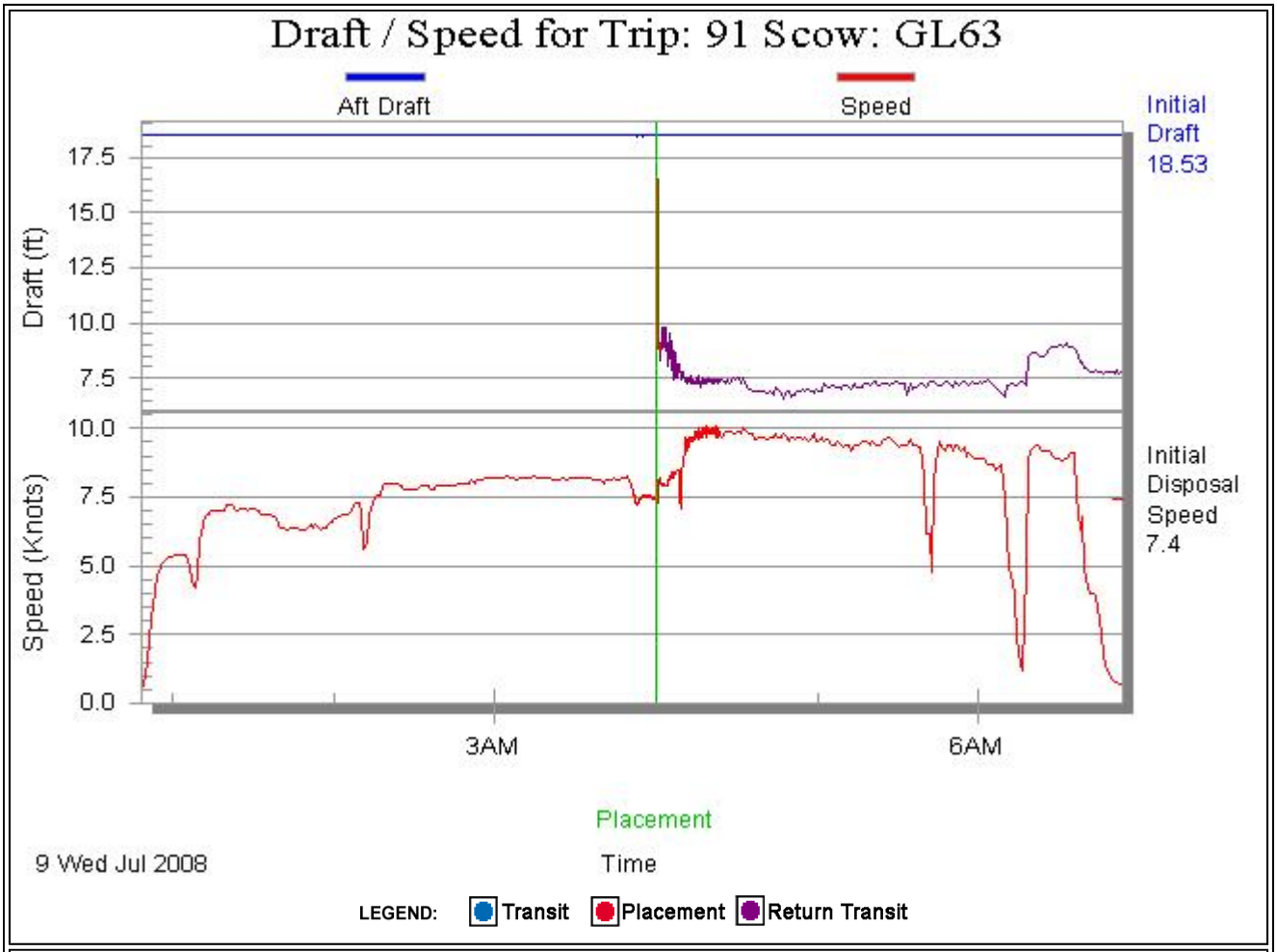


Trip Information

Trip #:	91
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5870 cu yd
Start Time:	7/9/2008 00:48:14
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/9/2008 04:00:16
Latitude:	42.415398
Longitude:	-70.600418
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/9/2008 04:01:15
Latitude:	42.416964
Longitude:	-70.598488
Aft Draft:	8.37 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 070908_142814

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

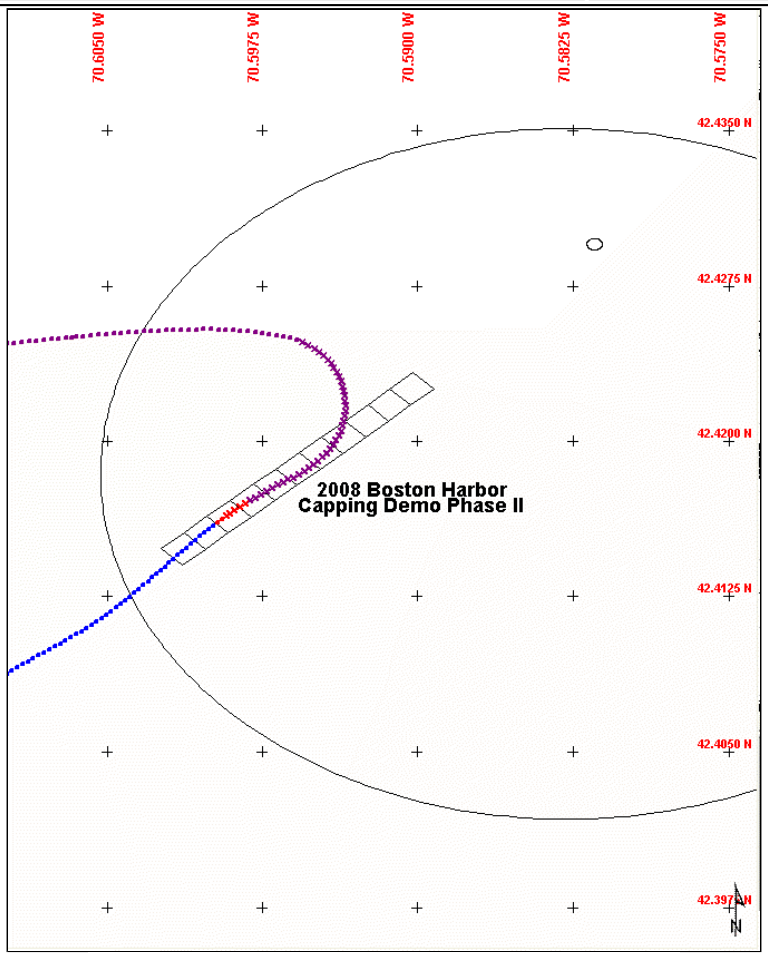
Trip #:	92
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	4600 cu yd
Start Time:	7/9/2008 07:55:30
Init Aft Draft:	17.89 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/9/2008 10:47:18	**Time:**	7/9/2008 10:47:51
Lat:	42.416073	**Lat:**	42.416940
Long:	-70.599678	**Long:**	-70.598337
Aft Draft:	16.85 ft	**Aft Draft:**	6.30 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/9/2008 7:52:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 14.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 070908_143256

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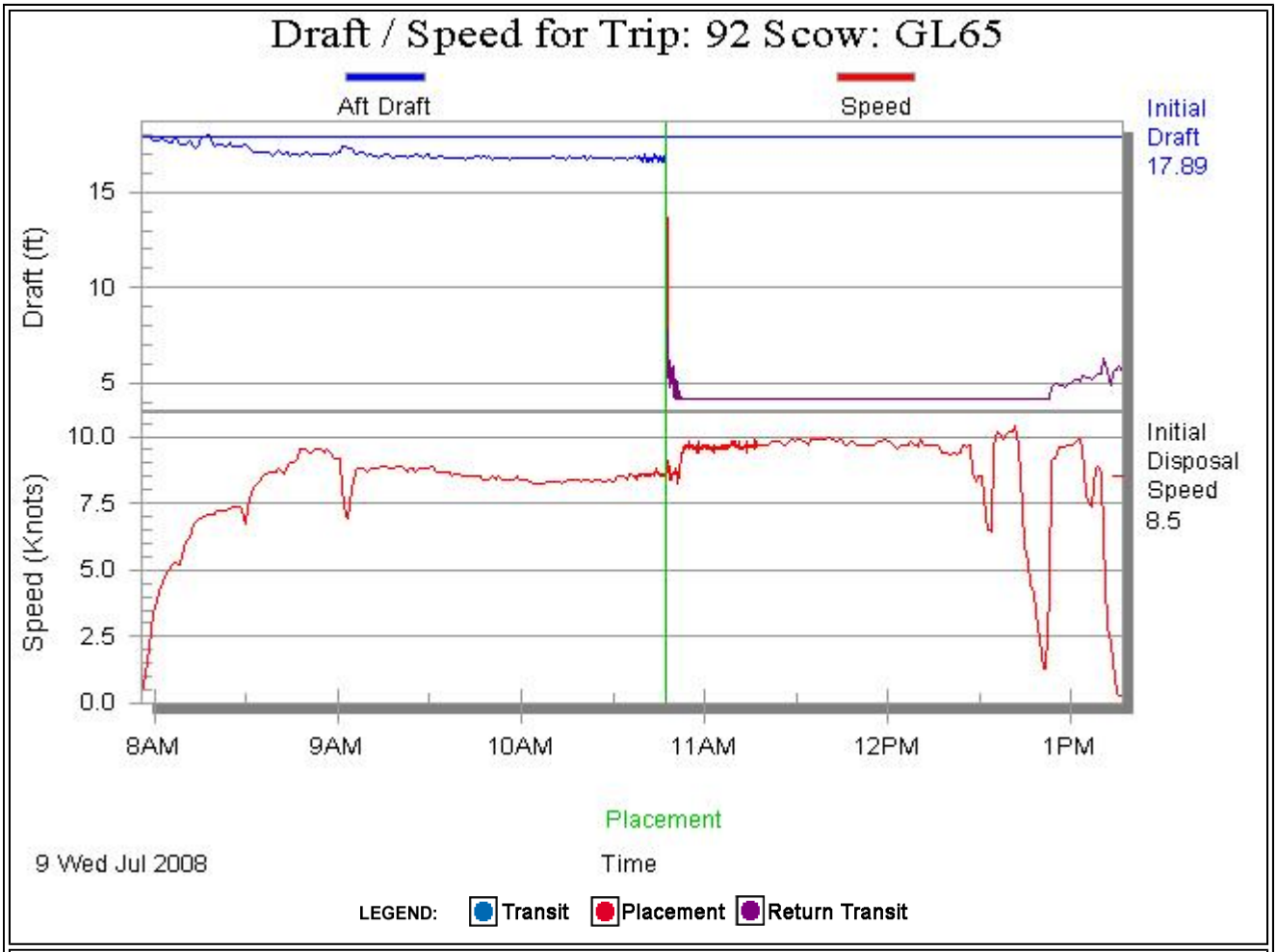


Trip Information

Trip #:	92
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	4600 cu yd
Start Time:	7/9/2008 07:55:30
Init Aft Draft:	17.89 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/9/2008 10:47:18
Latitude:	42.416073
Longitude:	-70.599678
Aft Draft:	16.85 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/9/2008 10:47:51
Latitude:	42.416940
Longitude:	-70.598337
Aft Draft:	6.30 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 070908_143256

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

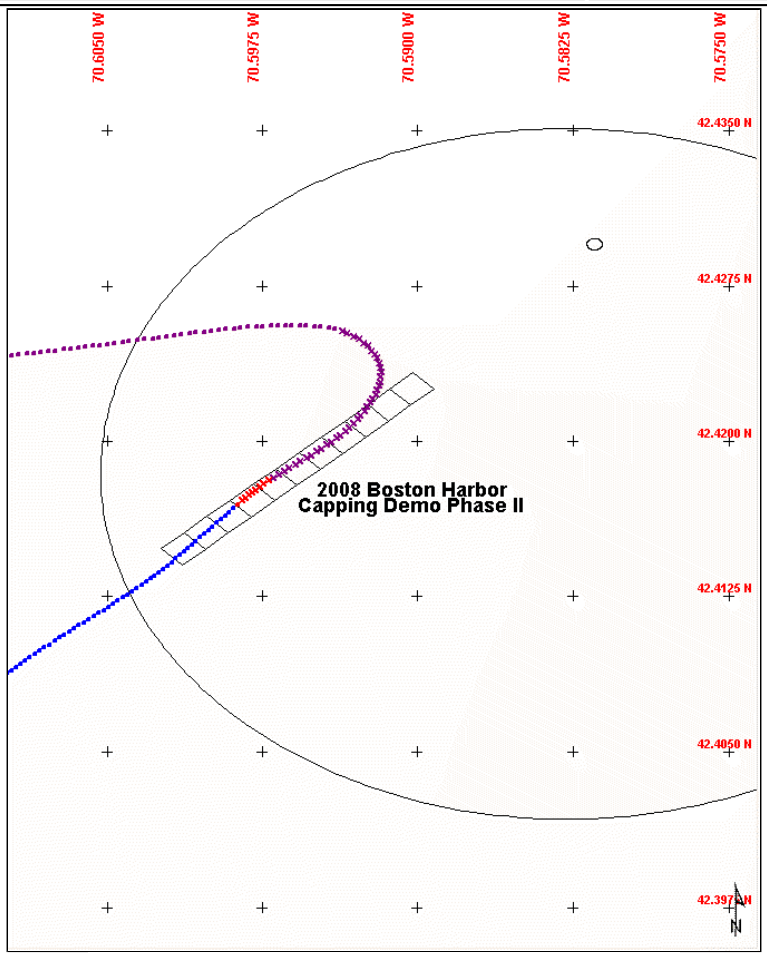
Trip #:	102
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/14/2008 08:14:52
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/14/2008 11:17:51	**Time:**	7/14/2008 11:18:33
Lat:	42.416901	**Lat:**	42.418110
Long:	-70.598708	**Long:**	-70.597185
Aft Draft:	20.03 ft	**Aft Draft:**	5.63 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/14/2008 8:13:00 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 071508_100351

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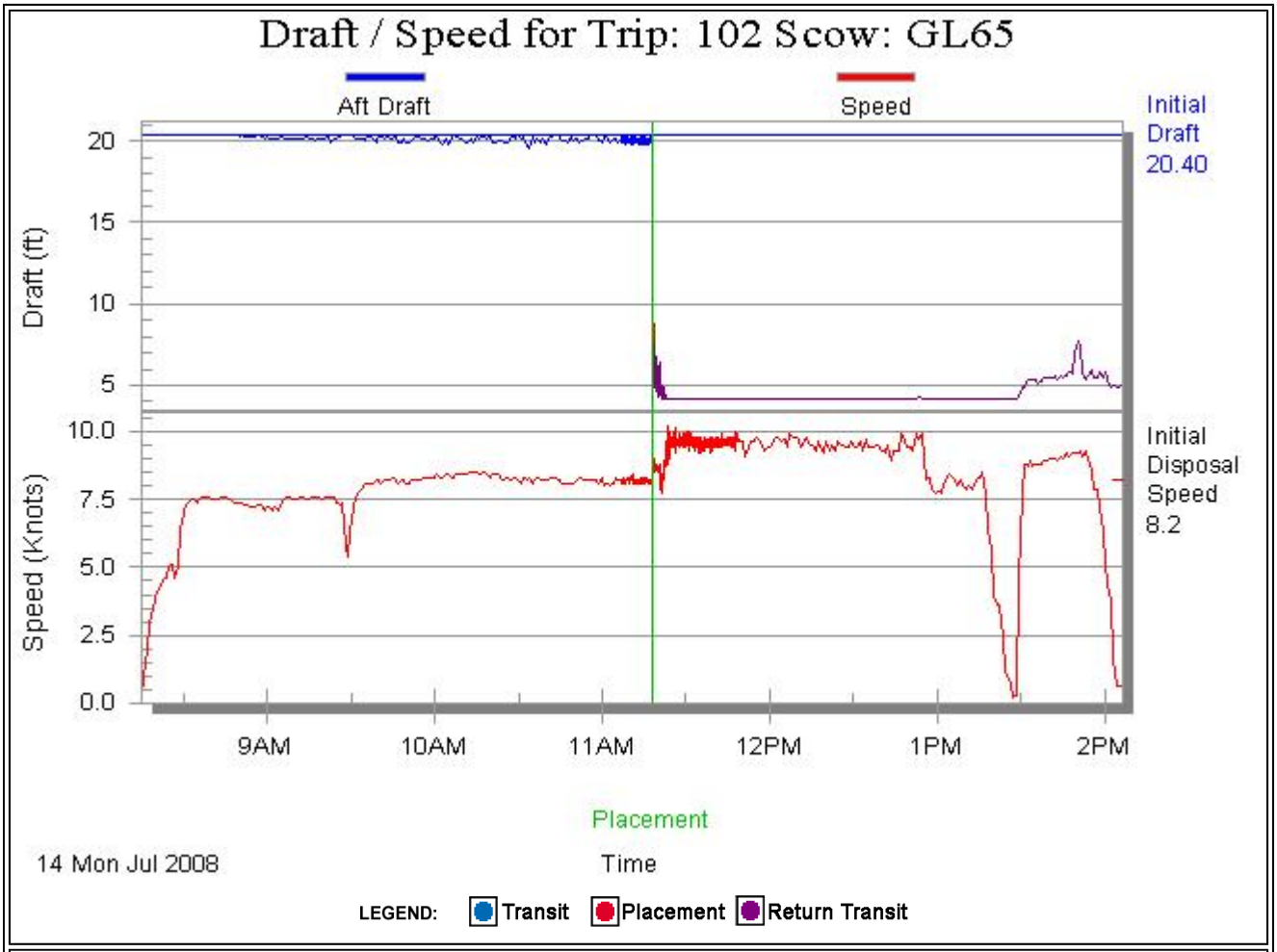


Trip Information

Trip #:	102
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/14/2008 08:14:52
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/14/2008 11:17:51
Latitude:	42.416901
Longitude:	-70.598708
Aft Draft:	20.03 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/14/2008 11:18:33
Latitude:	42.418110
Longitude:	-70.597185
Aft Draft:	5.63 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 071508_100351

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

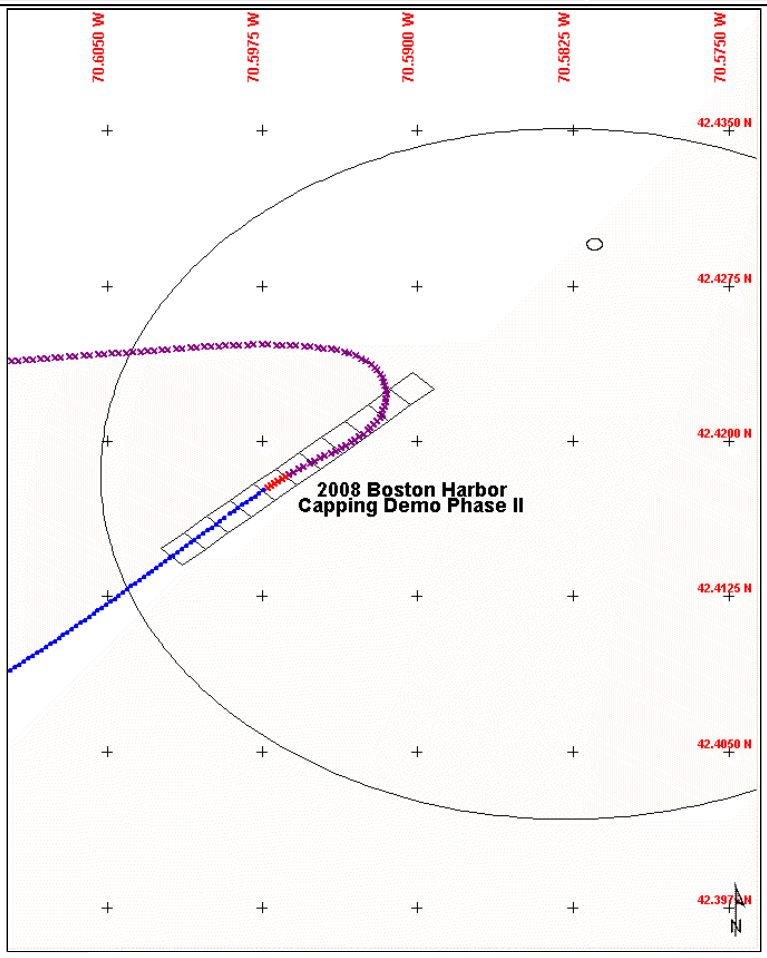
Trip #:	103
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/14/2008 15:00:58
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/14/2008 18:13:10	**Time:**	7/14/2008 18:13:34
Lat:	42.417735	**Lat:**	42.418315
Long:	-70.597233	**Long:**	-70.596409
Aft Draft:	18.61 ft	**Aft Draft:**	9.88 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/14/2008 2:43:00 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 071508_155918

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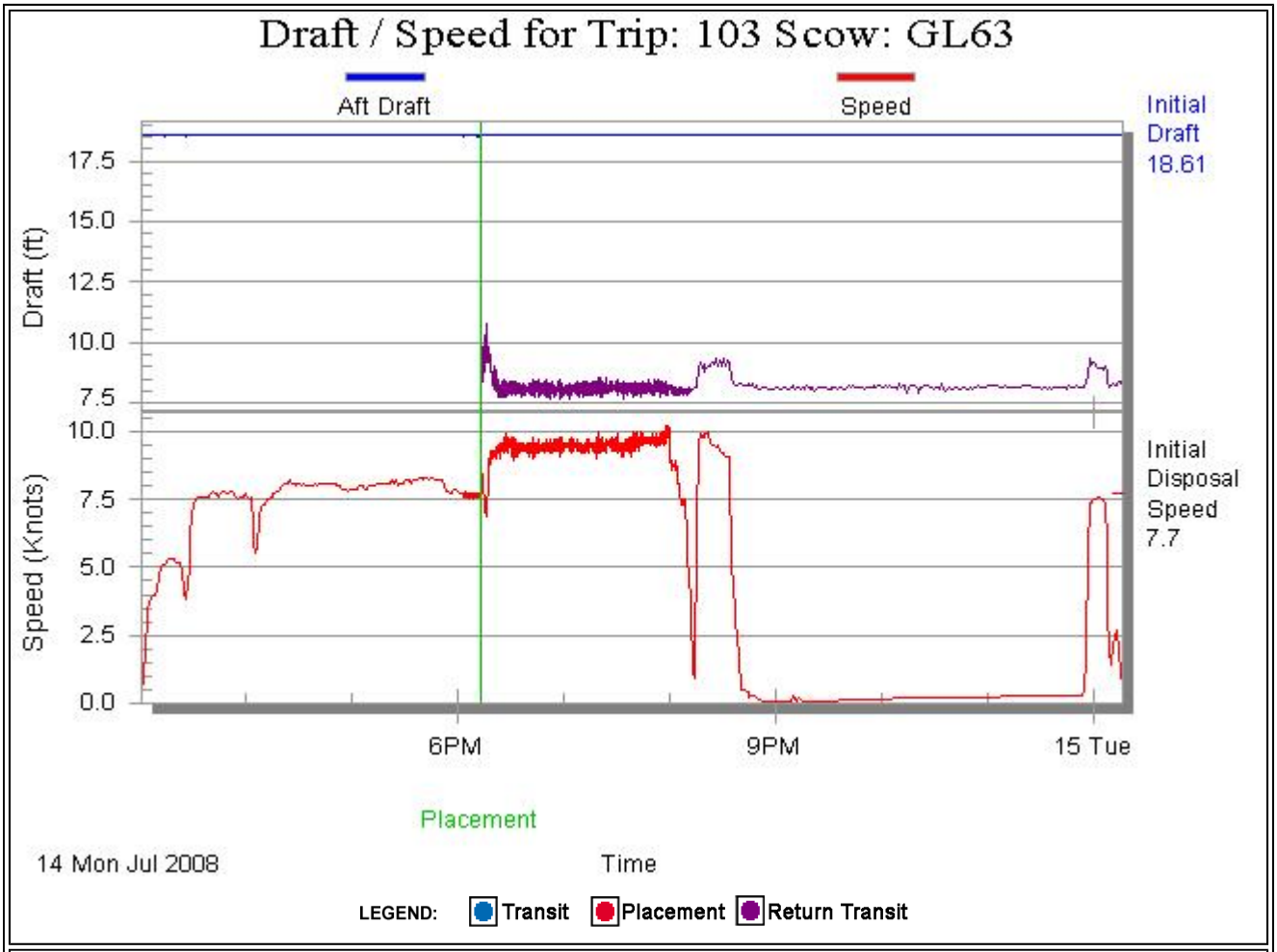


Trip Information

Trip #:	103
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/14/2008 15:00:58
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/14/2008 18:13:10
Latitude:	42.417735
Longitude:	-70.597233
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/14/2008 18:13:34
Latitude:	42.418315
Longitude:	-70.596409
Aft Draft:	9.88 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 071508_155918

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

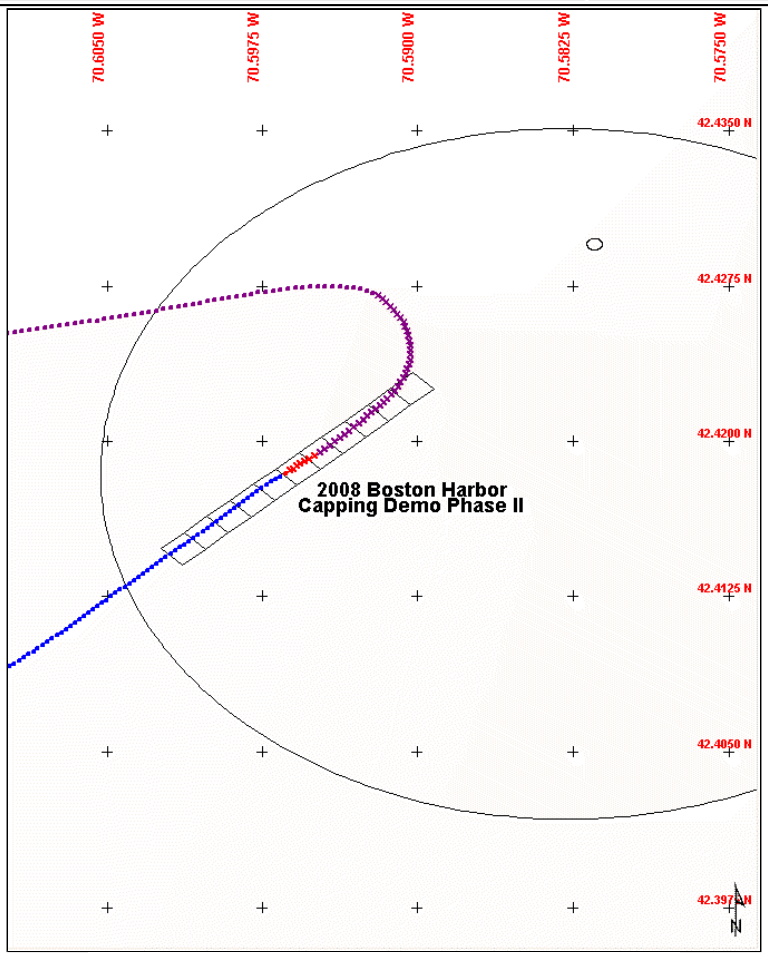
Trip #:	104
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/15/2008 01:05:37
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/15/2008 04:07:39	**Time:**	7/15/2008 04:08:14
Lat:	42.418468	**Lat:**	42.419336
Long:	-70.596415	**Long:**	-70.594995
Aft Draft:	20.17 ft	**Aft Draft:**	5.12 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/15/2008 1:04:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 071508_101111

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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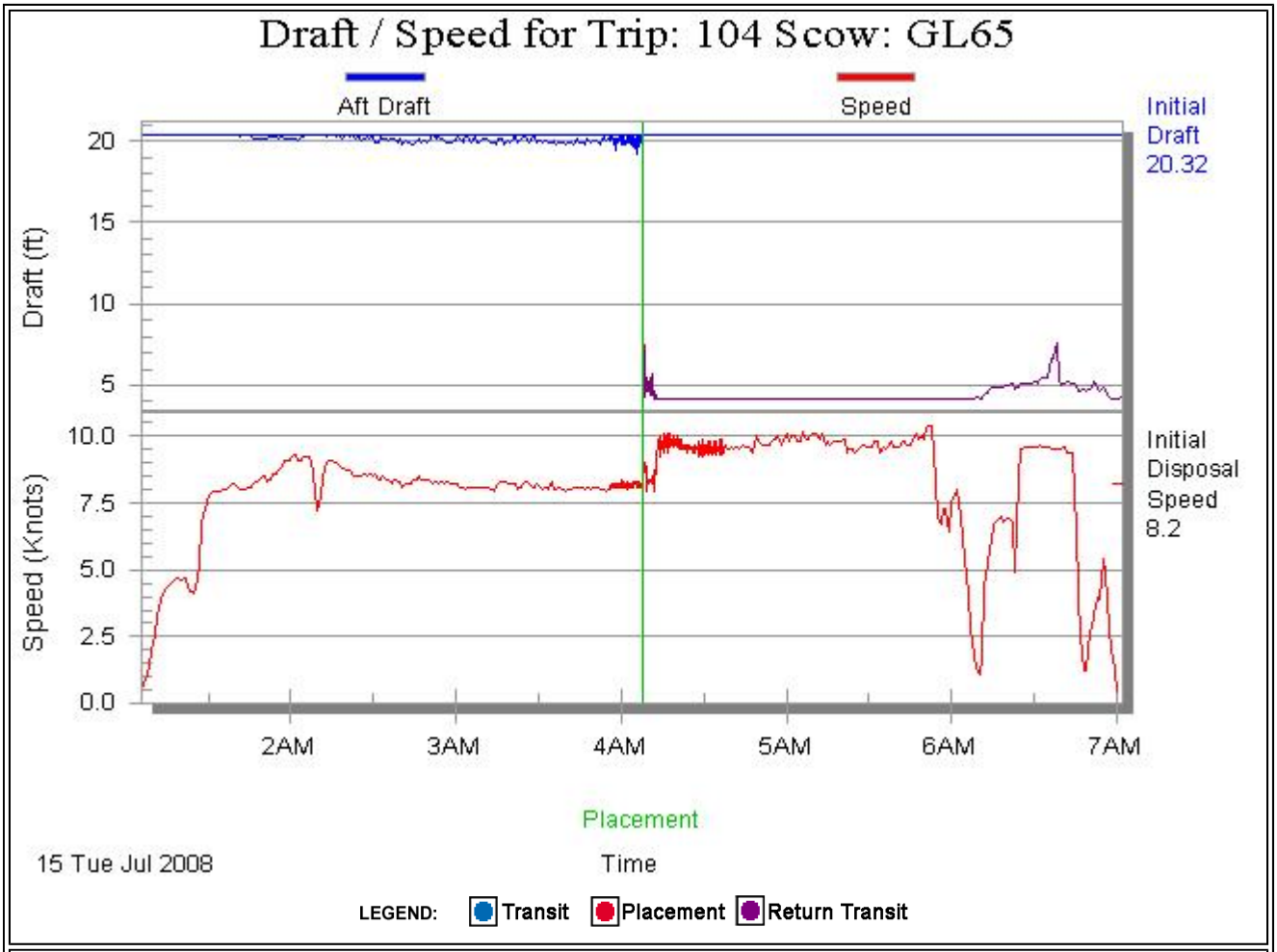


Trip Information

Trip #:	104
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/15/2008 01:05:37
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/15/2008 04:07:39
Latitude:	42.418468
Longitude:	-70.596415
Aft Draft:	20.17 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/15/2008 04:08:14
Latitude:	42.419336
Longitude:	-70.594995
Aft Draft:	5.12 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 071508_101111

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

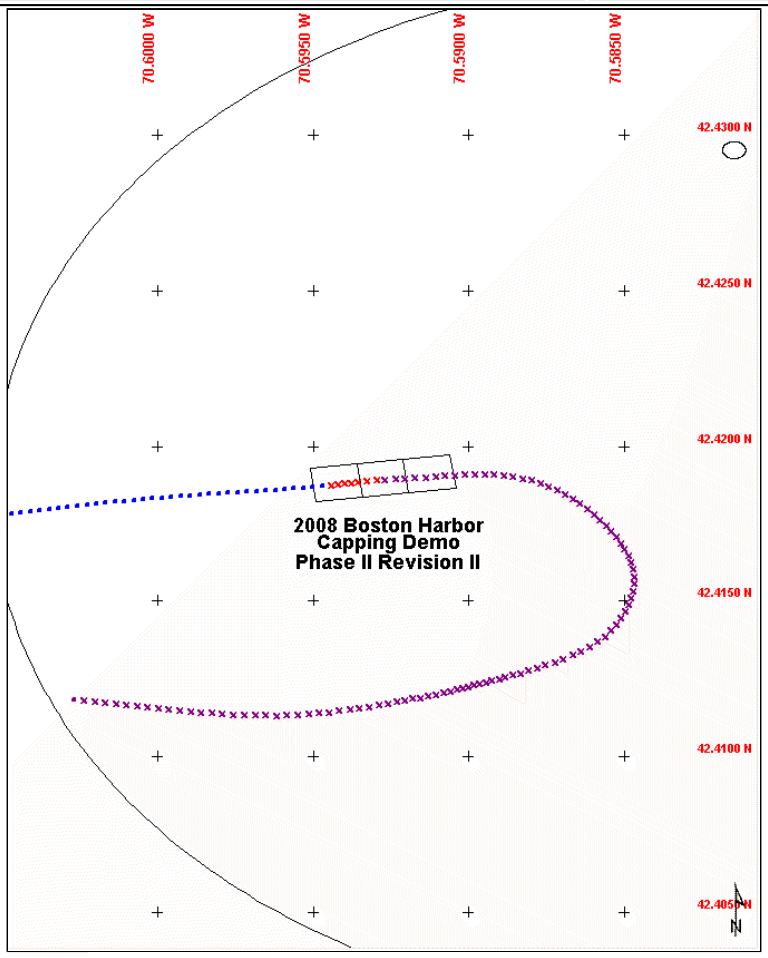
Trip #:	105
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/15/2008 07:28:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/15/2008 10:36:21	**Time:**	7/15/2008 10:36:50
Lat:	42.418722	**Lat:**	42.418864
Long:	-70.594432	**Long:**	-70.592976
Aft Draft:	18.53 ft	**Aft Draft:**	8.05 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/15/2008 10:41:00 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 071508_160713

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W912WJ-07-C-0023

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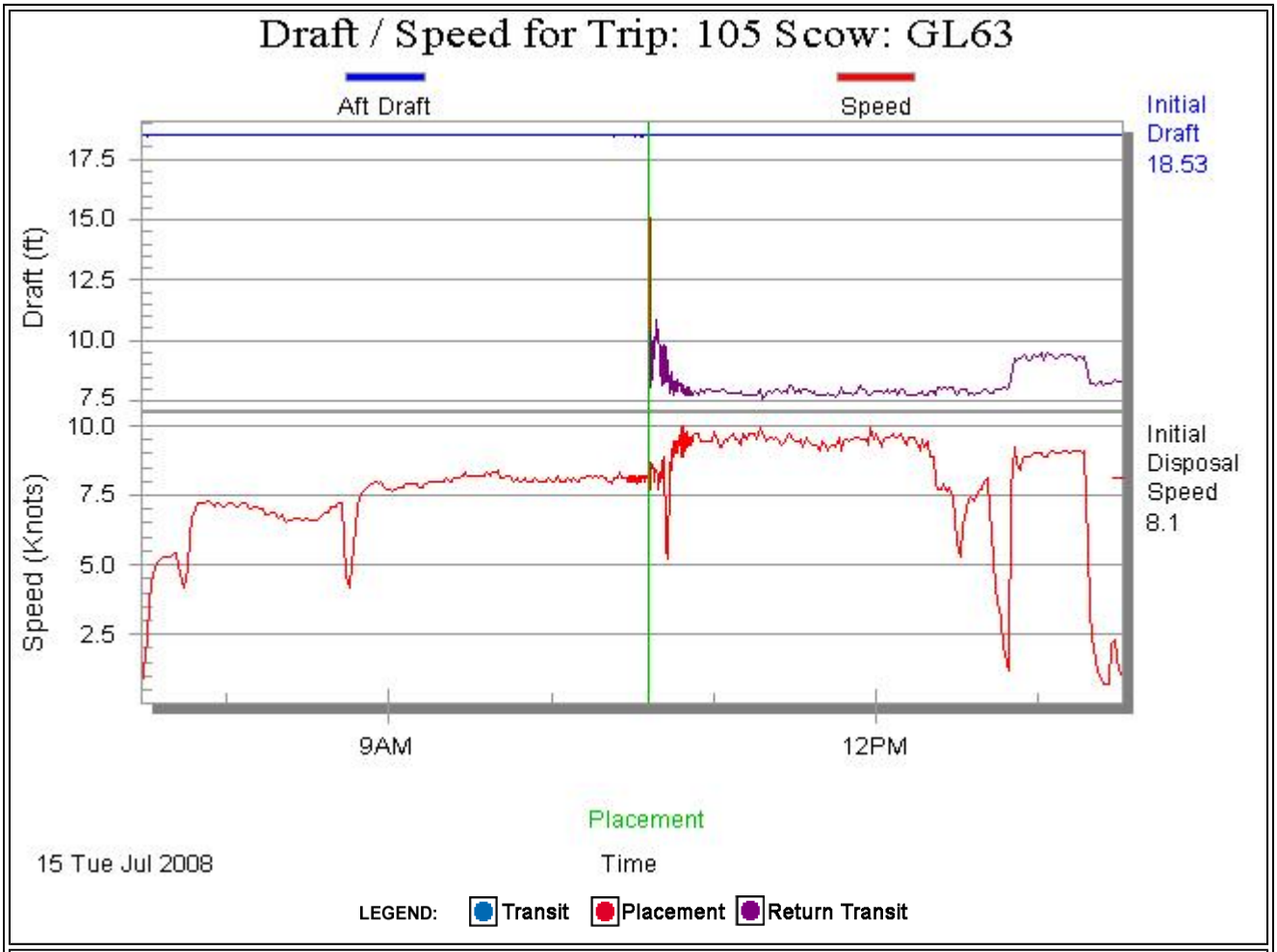


Trip Information

Trip #:	105
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/15/2008 07:28:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/15/2008 10:36:21
Latitude:	42.418722
Longitude:	-70.594432
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/15/2008 10:36:50
Latitude:	42.418864
Longitude:	-70.592976
Aft Draft:	8.05 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 071508_160713

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

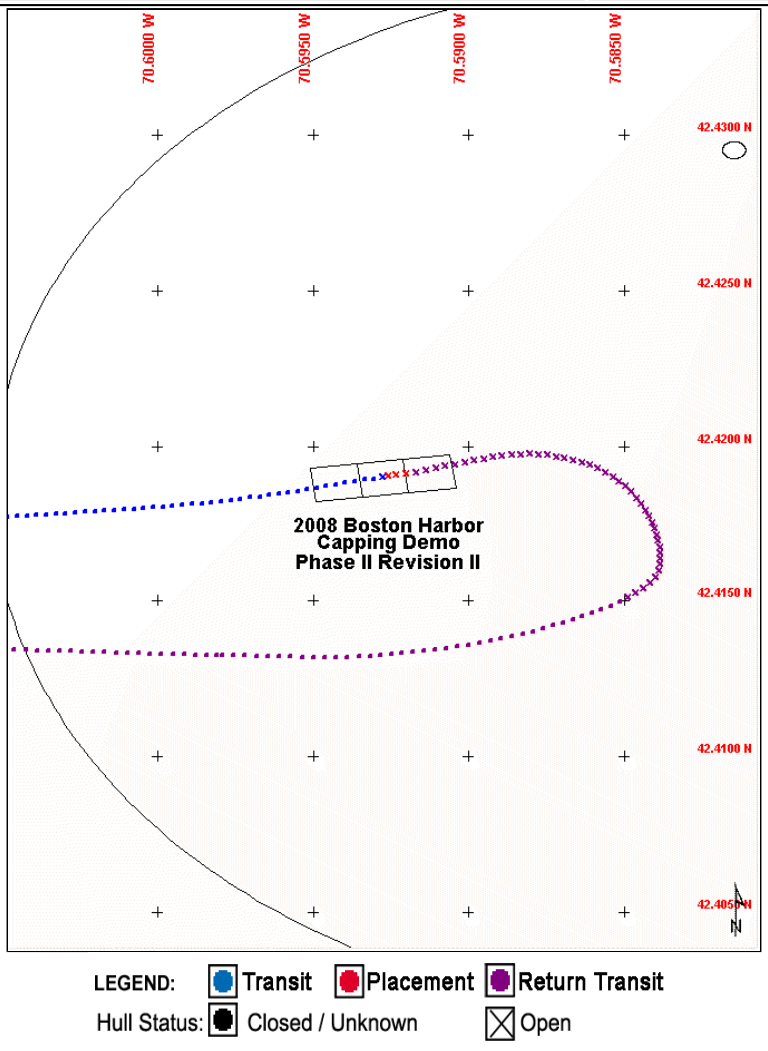
Trip #:	106
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5650 cu yd
Start Time:	7/15/2008 15:25:41
Init Aft Draft:	19.36 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/15/2008 18:28:49	**Time:**	7/15/2008 18:29:00
Lat:	42.419048	**Lat:**	42.419118
Long:	-70.592568	**Long:**	-70.591985
Aft Draft:	17.15 ft	**Aft Draft:**	6.15 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/15/2008 3:14:00 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 071608_114729

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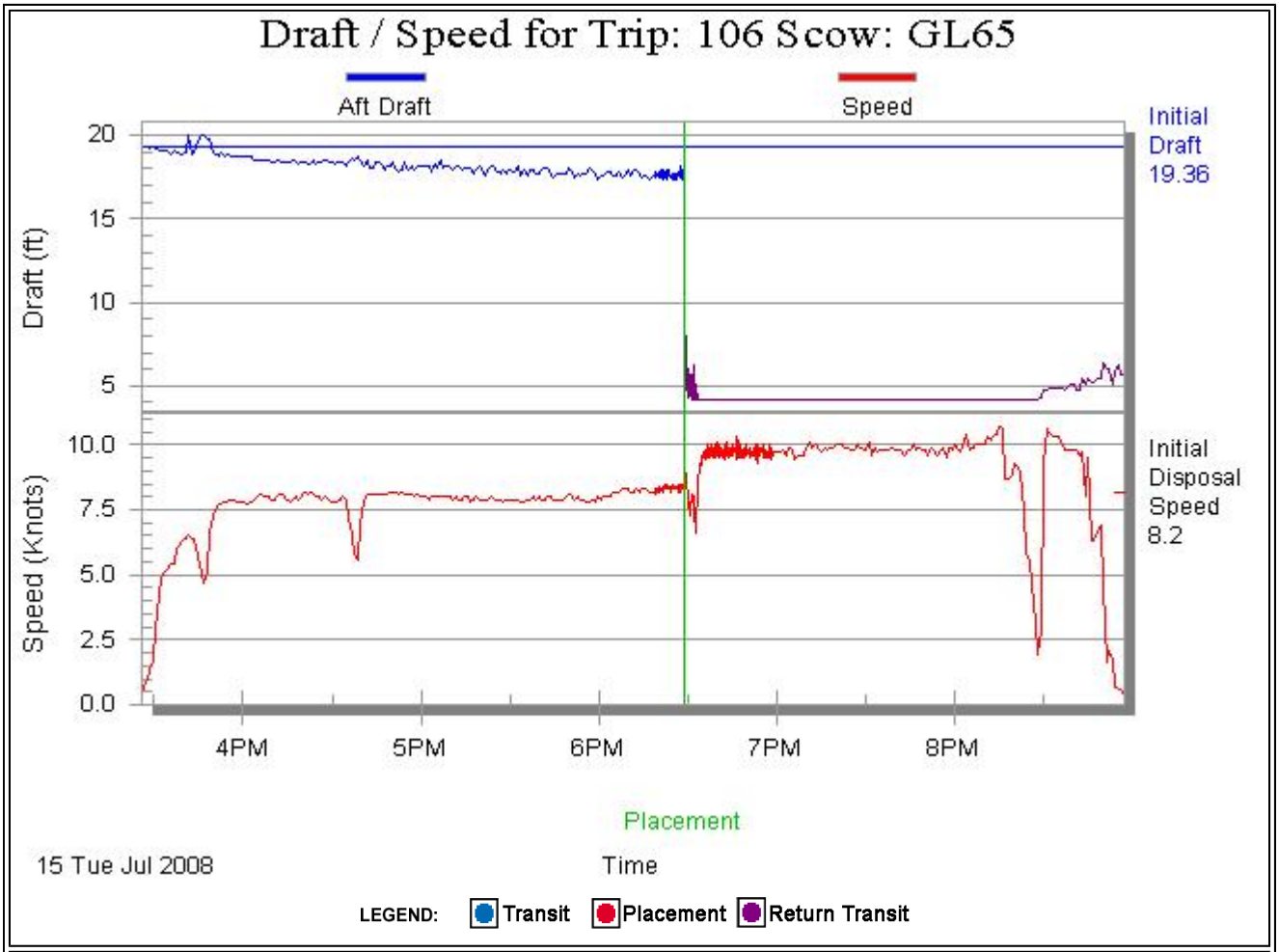


Trip Information

Trip #:	106
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5650 cu yd
Start Time:	7/15/2008 15:25:41
Init Aft Draft:	19.36 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/15/2008 18:28:49
Latitude:	42.419048
Longitude:	-70.592568
Aft Draft:	17.15 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/15/2008 18:29:00
Latitude:	42.419118
Longitude:	-70.591985
Aft Draft:	6.15 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 071608_114729

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

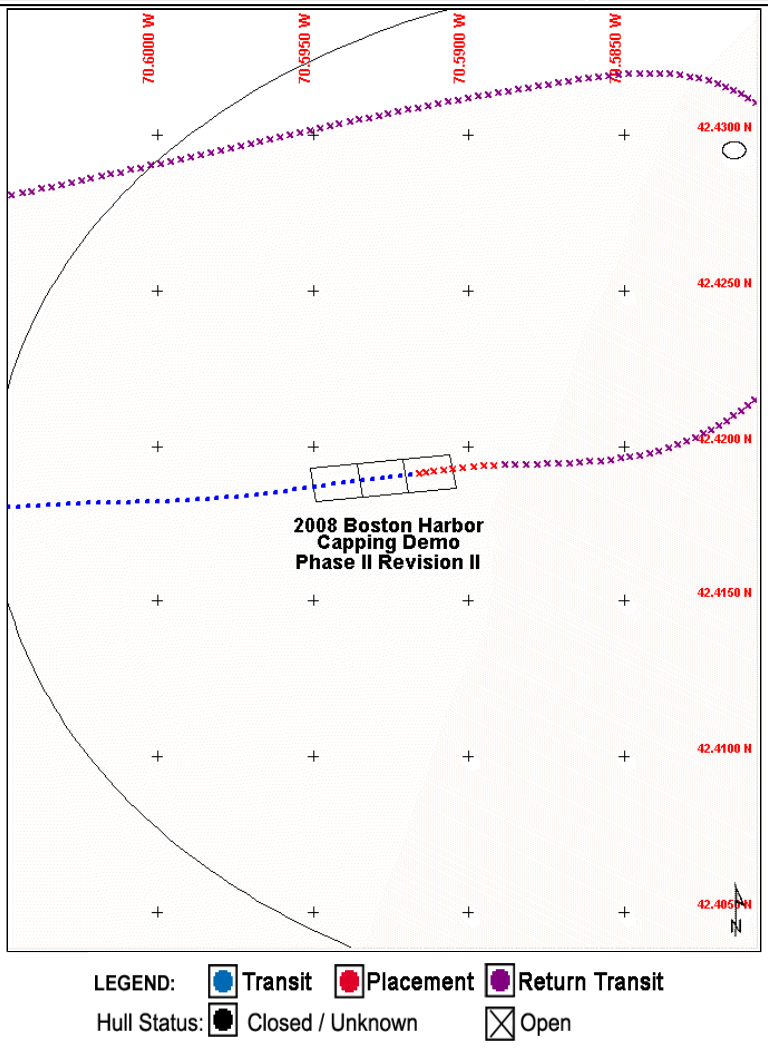
Trip #:	107
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/15/2008 22:33:49
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/16/2008 01:31:15	**Time:**	7/16/2008 01:32:00
Lat:	42.419139	**Lat:**	42.419393
Long:	-70.591564	**Long:**	-70.589163
Aft Draft:	18.53 ft	**Aft Draft:**	9.48 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/15/2008 10:33:49 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 071708_102600

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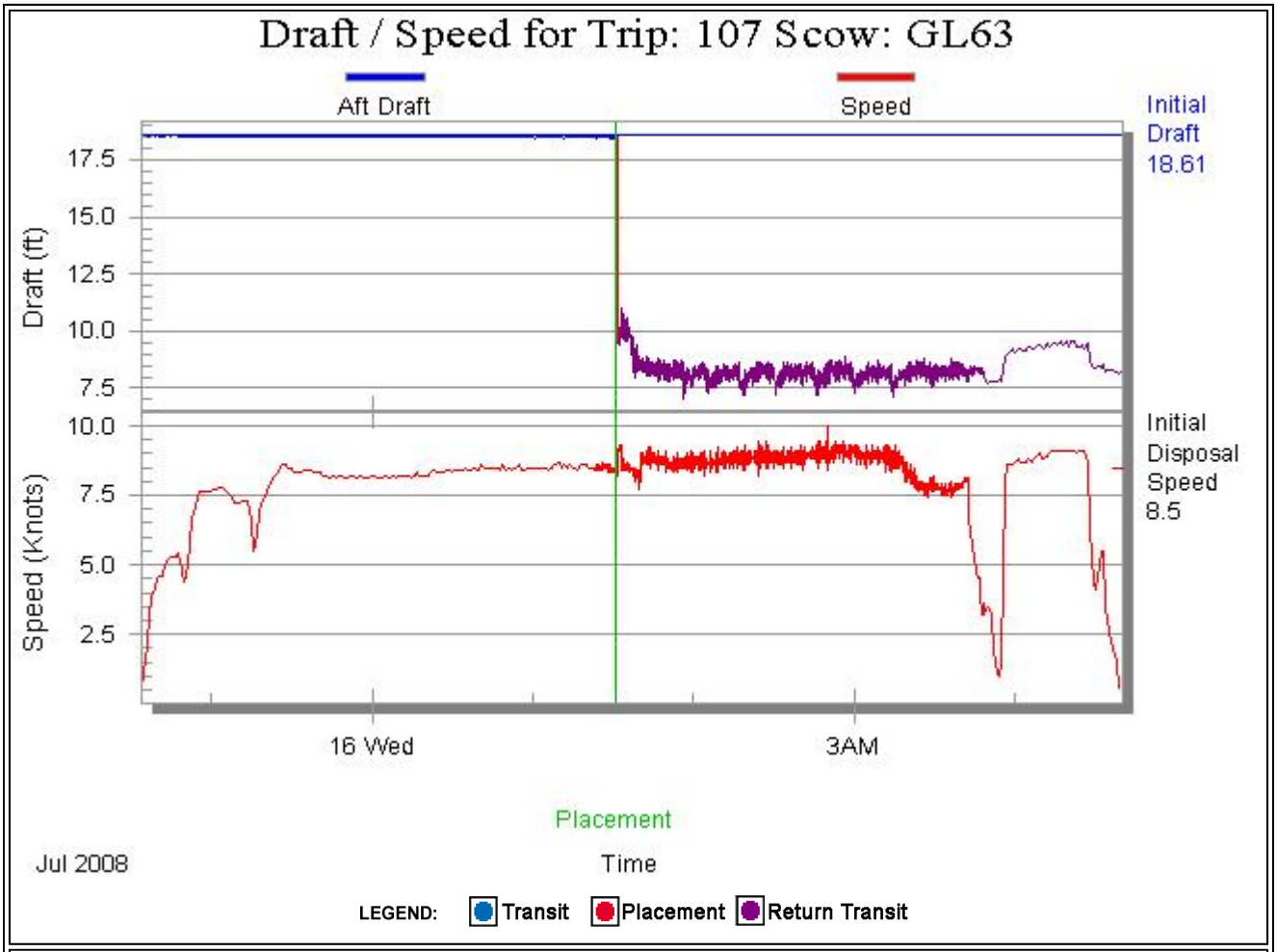


Trip Information

Trip #:	107
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/15/2008 22:33:49
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/16/2008 01:31:15
Latitude:	42.419139
Longitude:	-70.591564
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/16/2008 01:32:00
Latitude:	42.419393
Longitude:	-70.589163
Aft Draft:	9.48 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 071708_102600

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

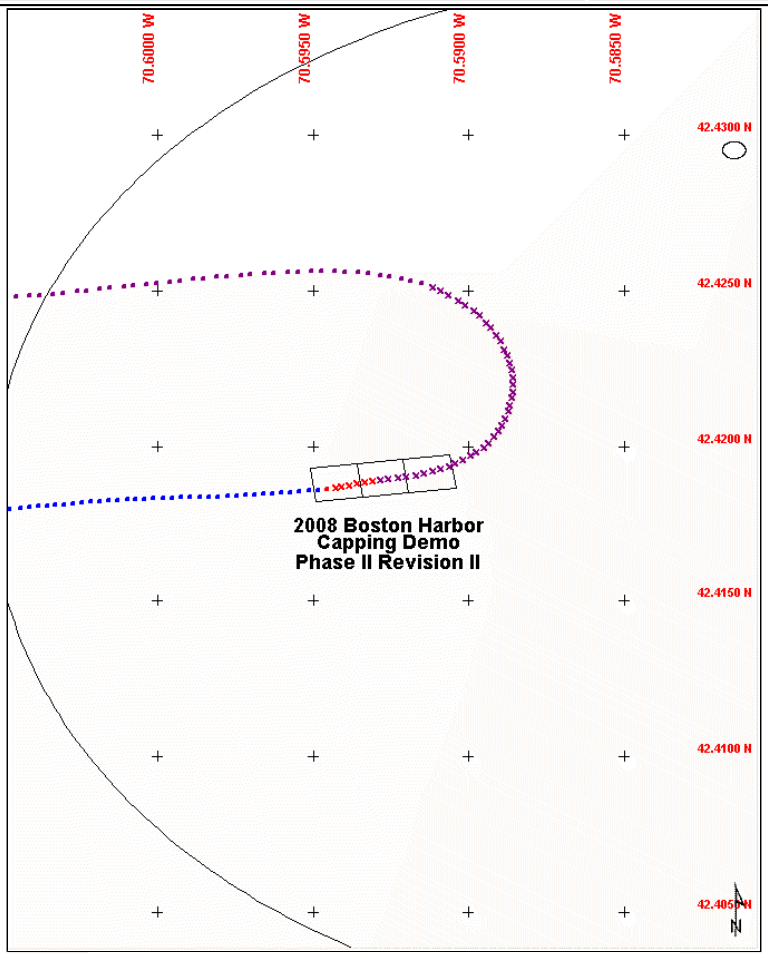
Trip #:	108
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/16/2008 05:03:57
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/16/2008 08:07:38	**Time:**	7/16/2008 08:08:08
Lat:	42.418606	**Lat:**	42.418846
Long:	-70.594579	**Long:**	-70.593128
Aft Draft:	18.77 ft	**Aft Draft:**	5.93 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/16/2008 5:03:57 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 071708_102804

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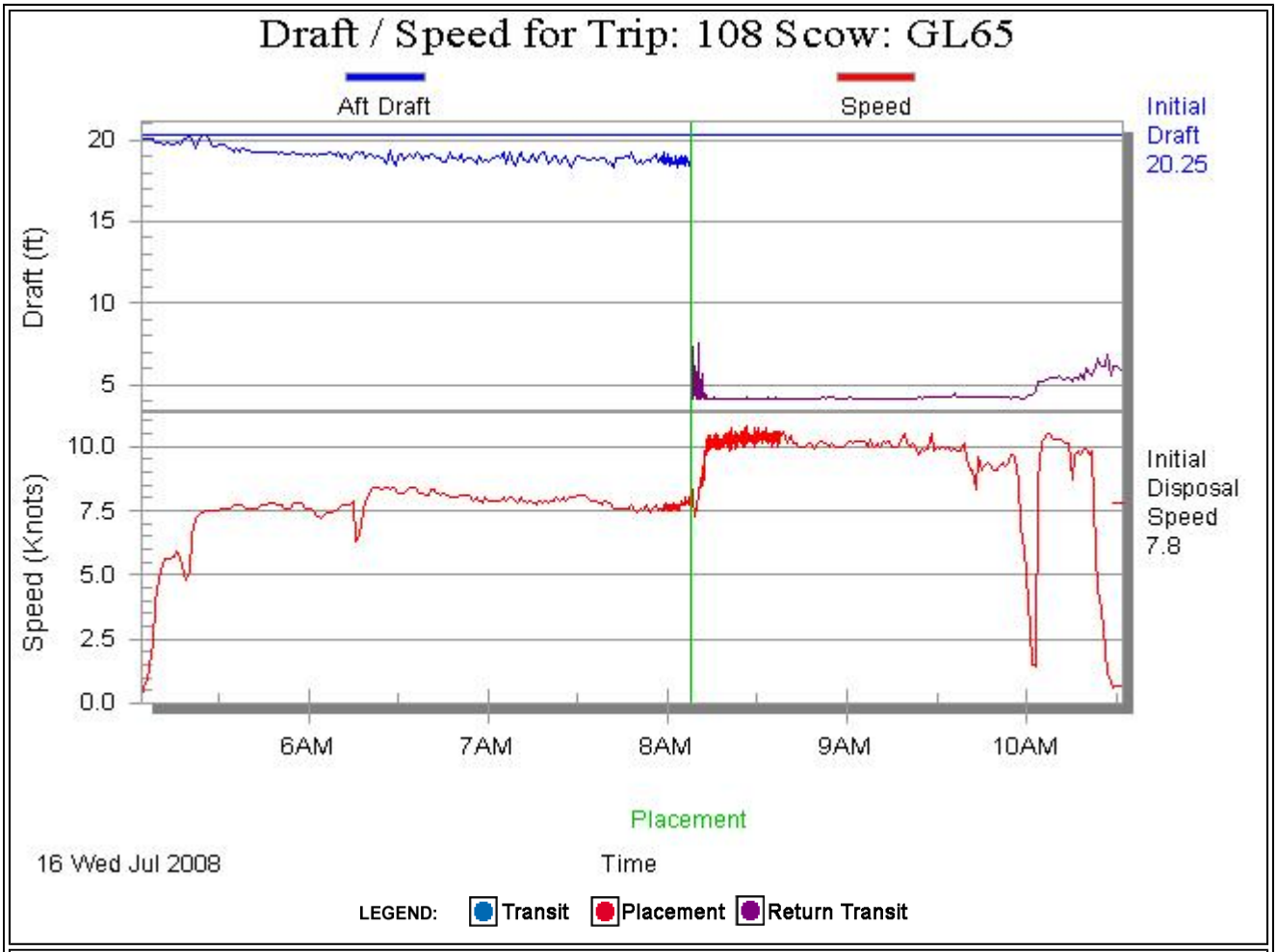


Trip Information

Trip #:	108
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/16/2008 05:03:57
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/16/2008 08:07:38
Latitude:	42.418606
Longitude:	-70.594579
Aft Draft:	18.77 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/16/2008 08:08:08
Latitude:	42.418846
Longitude:	-70.593128
Aft Draft:	5.93 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 071708_102804

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

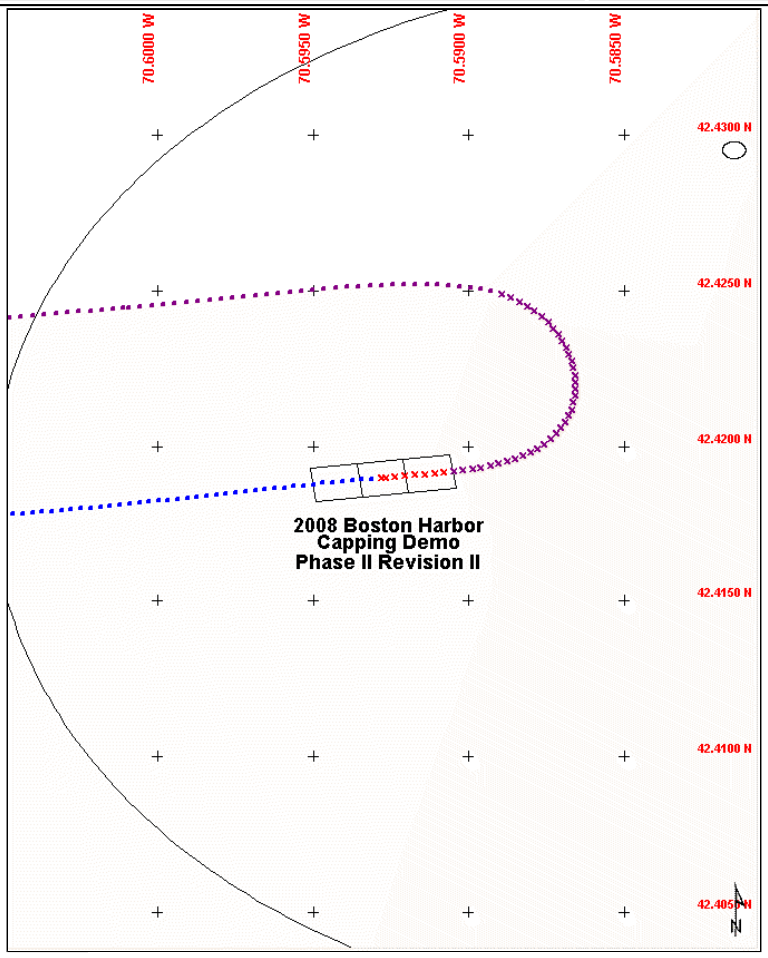
Trip #:	110
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	4975 cu yd
Start Time:	7/17/2008 04:36:48
Init Aft Draft:	15.67 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/17/2008 07:24:38	**Time:**	7/17/2008 07:25:17
Lat:	42.418984	**Lat:**	42.419162
Long:	-70.592837	**Long:**	-70.590765
Aft Draft:	14.27 ft	**Aft Draft:**	4.16 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/17/2008 4:36:48 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_111725

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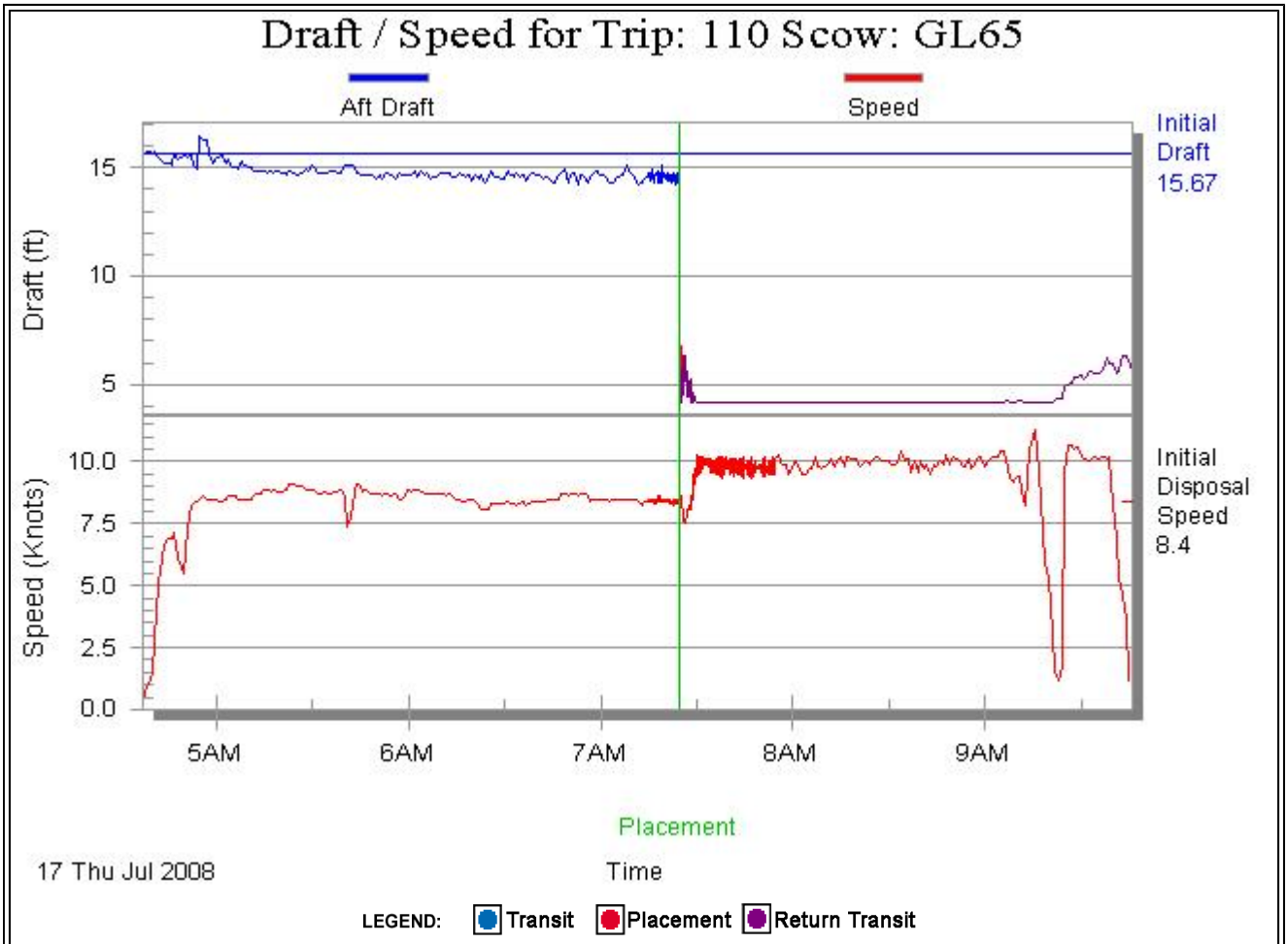


Trip Information

Trip #:	110
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	4975 cu yd
Start Time:	7/17/2008 04:36:48
Init Aft Draft:	15.67 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/17/2008 07:24:38
Latitude:	42.418984
Longitude:	-70.592837
Aft Draft:	14.27 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/17/2008 07:25:17
Latitude:	42.419162
Longitude:	-70.590765
Aft Draft:	4.16 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_111725

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

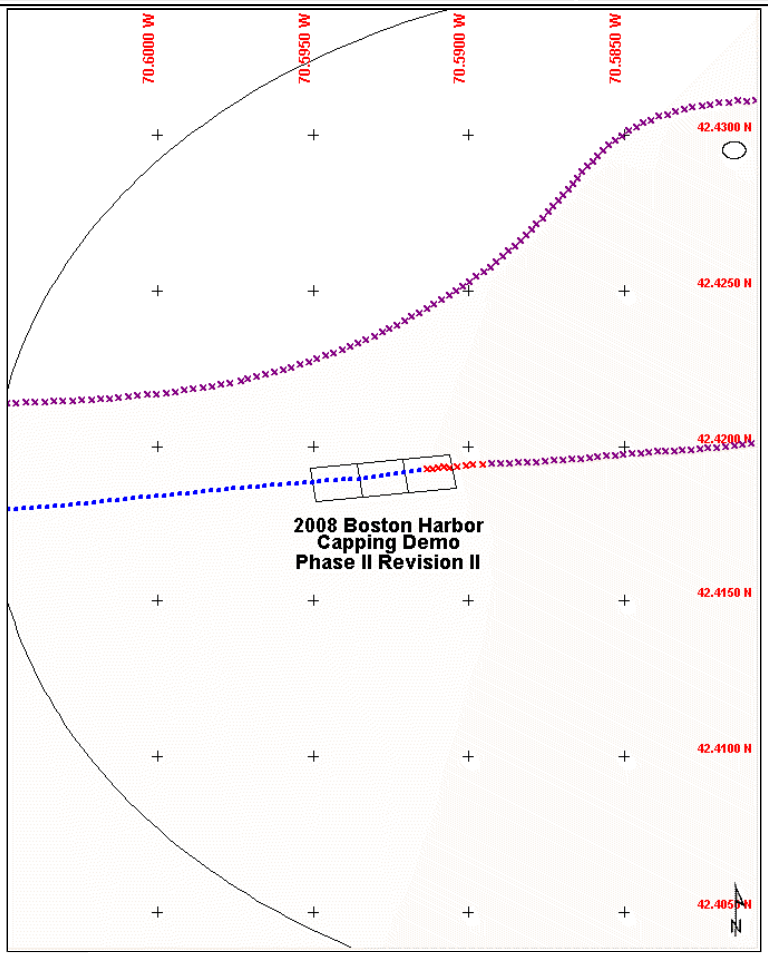
Trip #:	111
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/17/2008 18:00:57
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/17/2008 21:53:32	**Time:**	7/17/2008 21:54:13
Lat:	42.419263	**Lat:**	42.419432
Long:	-70.591322	**Long:**	-70.589517
Aft Draft:	18.53 ft	**Aft Draft:**	9.25 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/17/2008 6:00:57 PM (Local)
Wave Height: 3.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL63 returned from the disposal area while OPEN. The hull status sensor returned to CLOSED after the scow returned to the dredge area.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_112003

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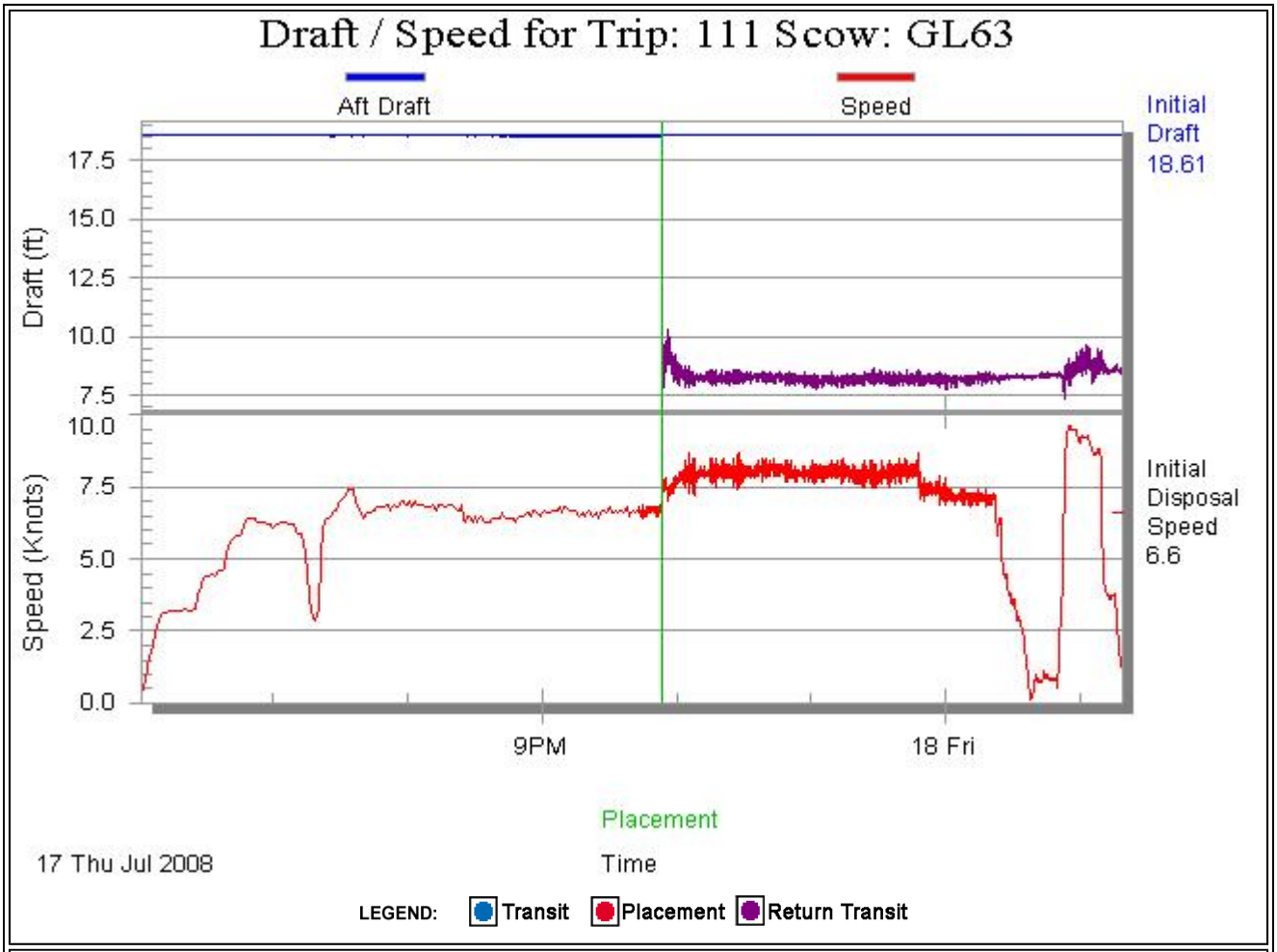


Trip Information

Trip #:	111
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/17/2008 18:00:57
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/17/2008 21:53:32	**Time:**	7/17/2008 21:54:13
Latitude:	42.419263	**Latitude:**	42.419432
Longitude:	-70.591322	**Longitude:**	-70.589517
Aft Draft:	18.53 ft	**Aft Draft:**	9.25 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL63 returned from the disposal area while OPEN. The hull status sensor returned to CLOSED after the scow returned to the dredge area.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_112003

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

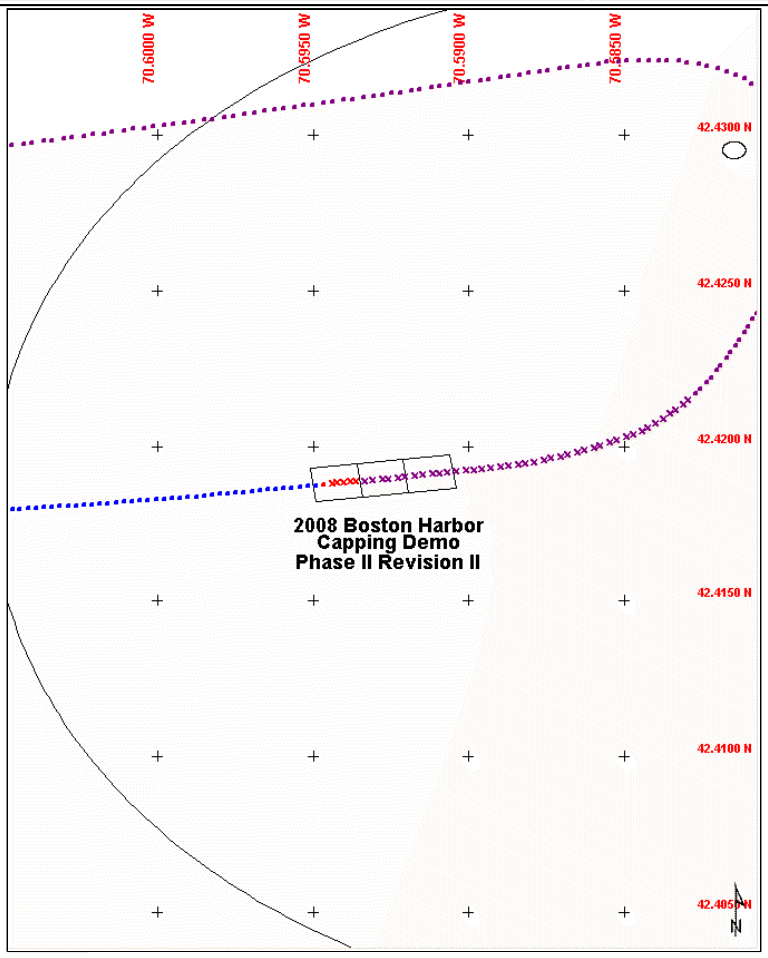
Trip #:	112
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5675 cu yd
Start Time:	7/18/2008 07:26:14
Init Aft Draft:	20.10 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/18/2008 11:03:43	**Time:**	7/18/2008 11:04:06
Lat:	42.418747	**Lat:**	42.418834
Long:	-70.594670	**Long:**	-70.593656
Aft Draft:	18.99 ft	**Aft Draft:**	5.63 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/18/2008 7:26:14 AM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_112213

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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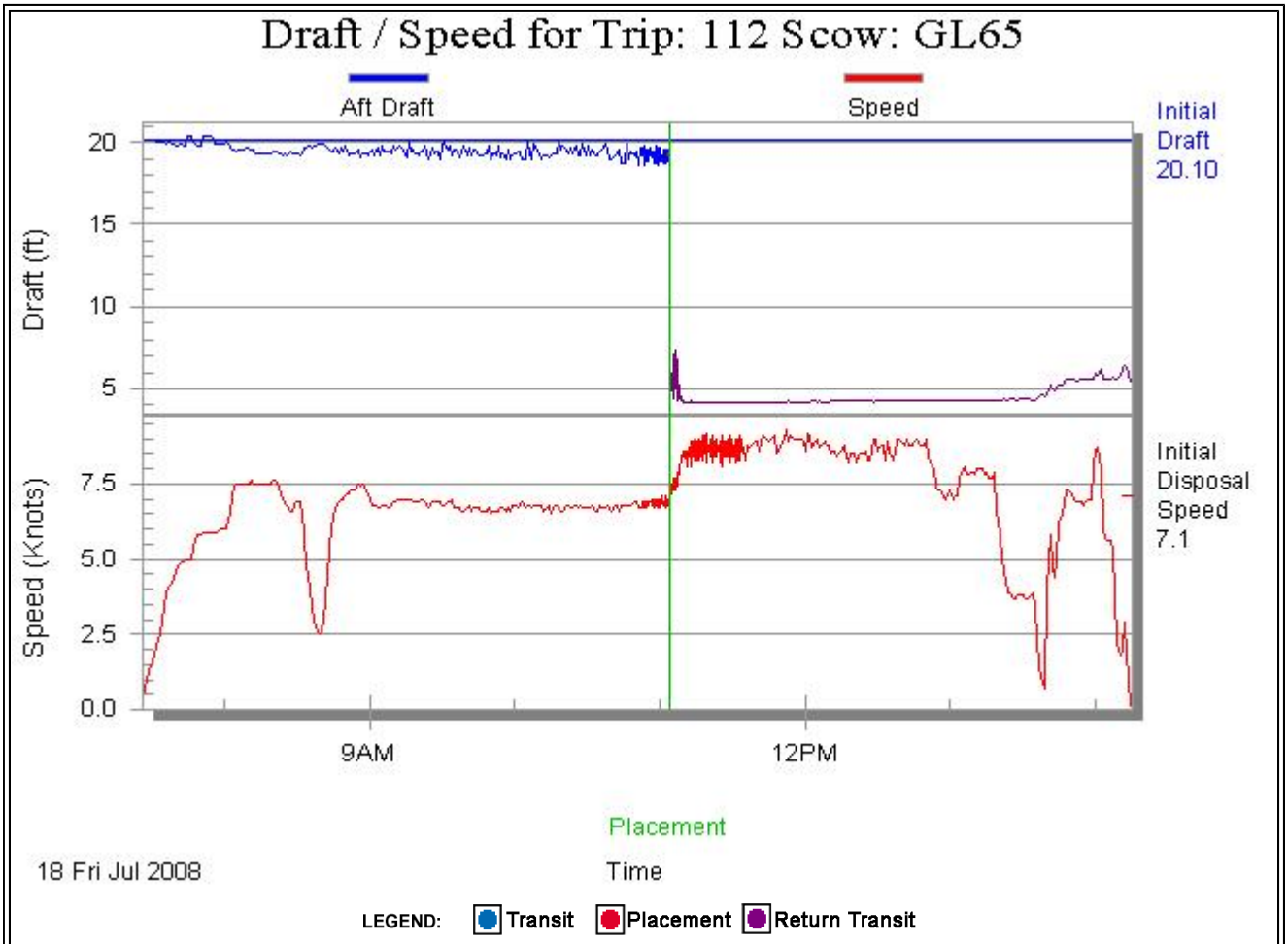


Trip Information

Trip #:	112
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5675 cu yd
Start Time:	7/18/2008 07:26:14
Init Aft Draft:	20.10 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/18/2008 11:03:43
Latitude:	42.418747
Longitude:	-70.594670
Aft Draft:	18.99 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/18/2008 11:04:06
Latitude:	42.418834
Longitude:	-70.593656
Aft Draft:	5.63 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_112213

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

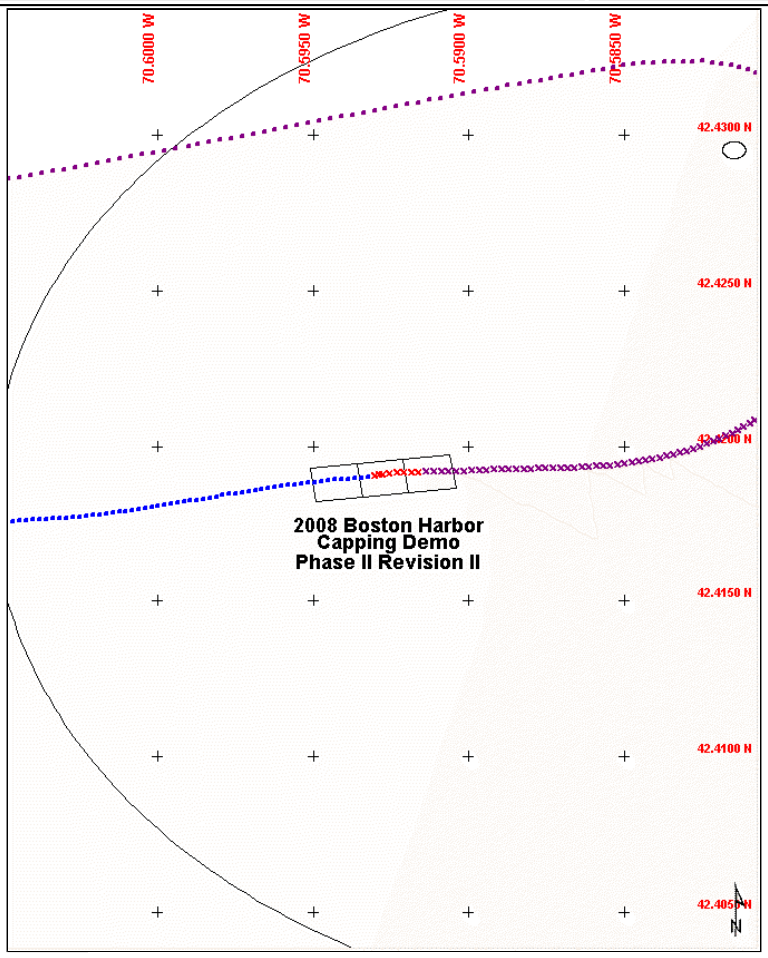
Trip #:	113
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/18/2008 18:58:32
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/18/2008 22:40:14	**Time:**	7/18/2008 22:40:53
Lat:	42.419068	**Lat:**	42.419184
Long:	-70.593051	**Long:**	-70.591589
Aft Draft:	18.53 ft	**Aft Draft:**	9.32 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/18/2008 6:31:00 PM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_112448

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W912WJ-07-C-0023

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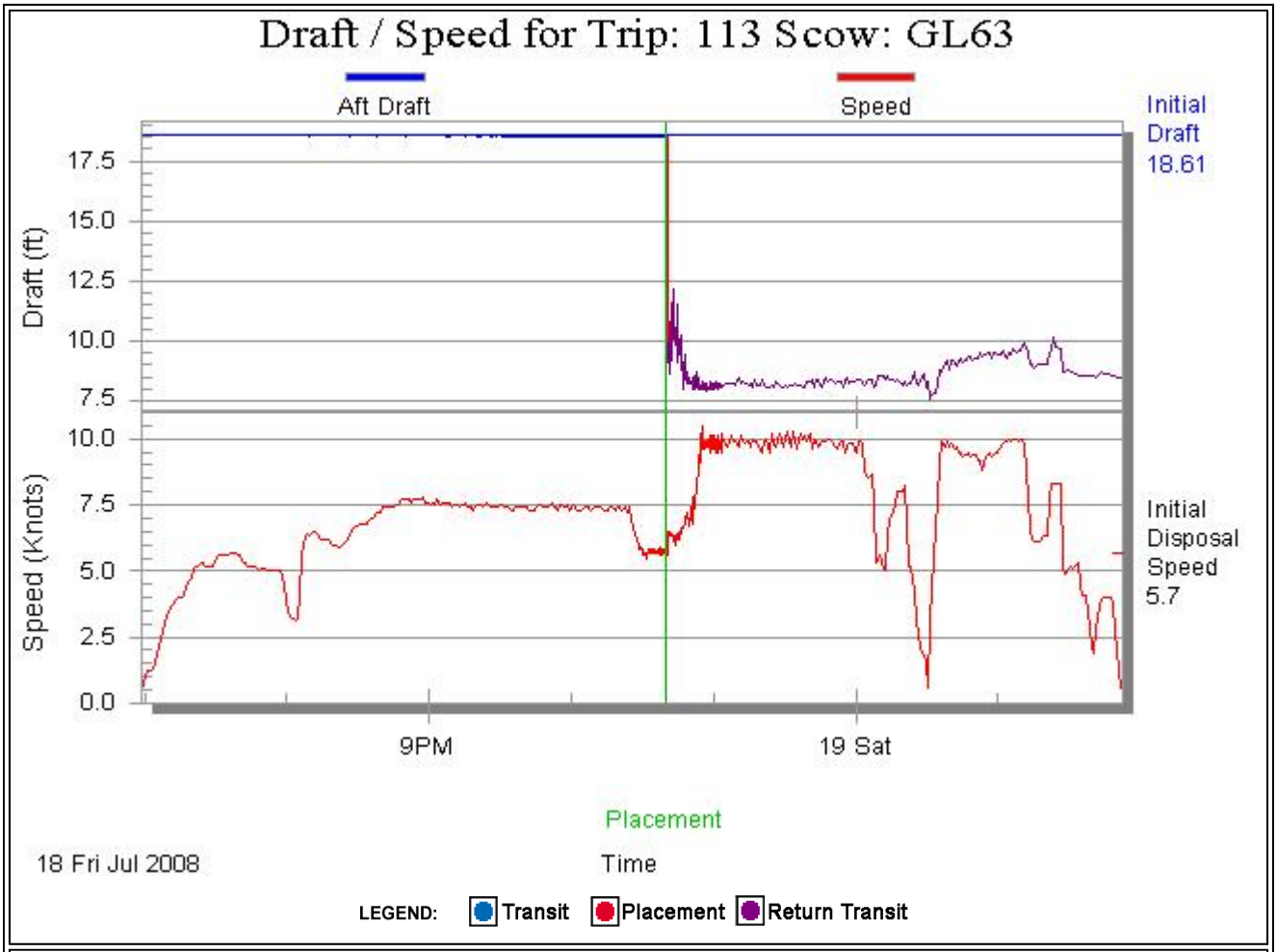


Trip Information

Trip #:	113
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/18/2008 18:58:32
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/18/2008 22:40:14	**Time:**	7/18/2008 22:40:53
Latitude:	42.419068	**Latitude:**	42.419184
Longitude:	-70.593051	**Longitude:**	-70.591589
Aft Draft:	18.53 ft	**Aft Draft:**	9.32 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_112448

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	114
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/19/2008 01:58:21
Init Aft Draft:	19.66 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

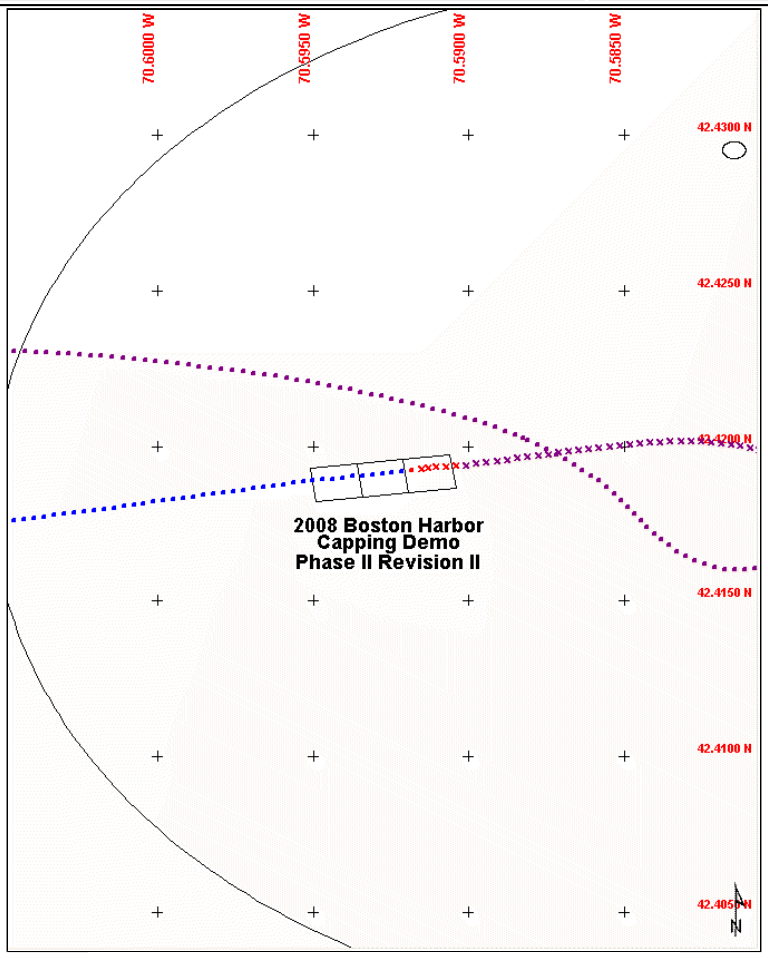
	Placement Start:	Placement End:
Time:	7/19/2008 05:36:25	7/19/2008 05:36:52
Lat:	42.419250	42.419371
Long:	-70.591824	-70.590375
Aft Draft:	18.55 ft	5.34 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 7/19/2008 2:02:00 AM (Local)

Wave Height: 2.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_112819

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W912WJ-07-C-0023

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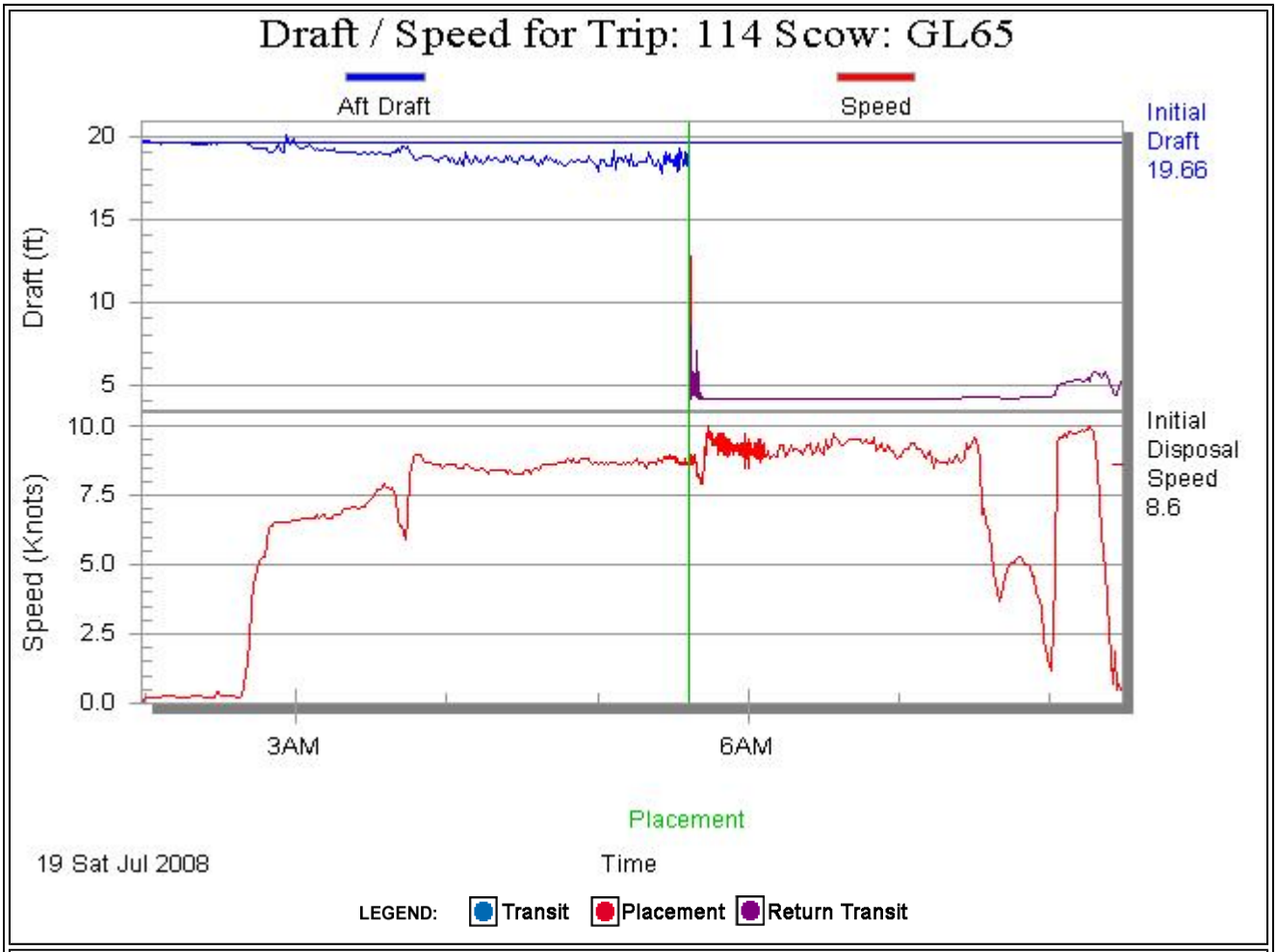


Trip Information

Trip #:	114
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/19/2008 01:58:21
Init Aft Draft:	19.66 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/19/2008 05:36:25
Latitude:	42.419250
Longitude:	-70.591824
Aft Draft:	18.55 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/19/2008 05:36:52
Latitude:	42.419371
Longitude:	-70.590375
Aft Draft:	5.34 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_112819

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

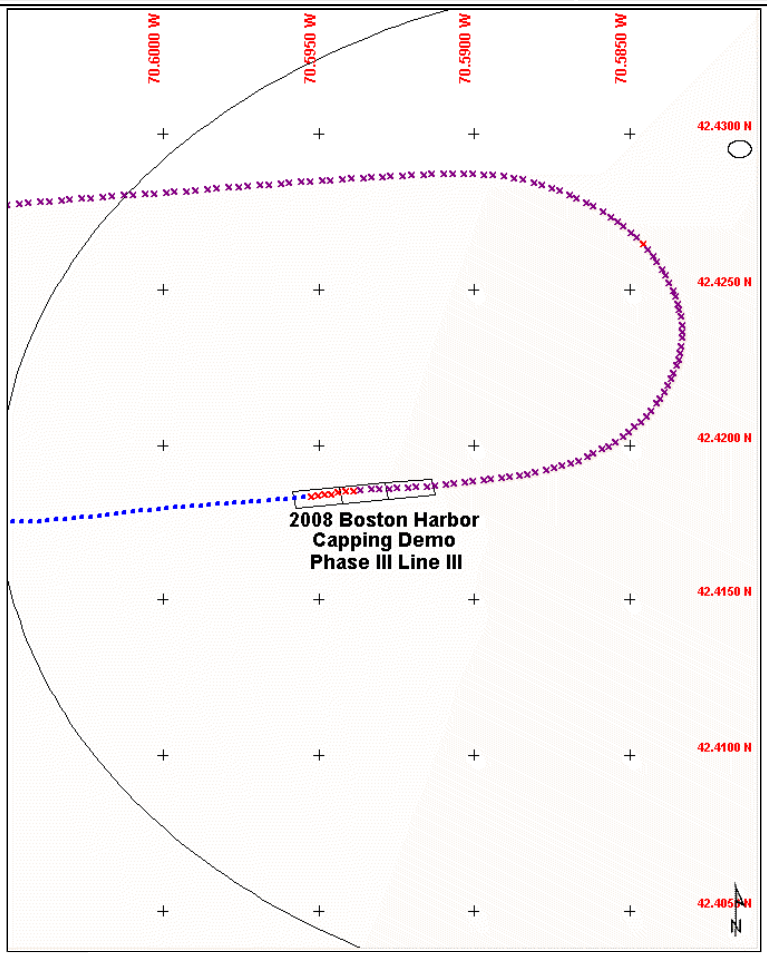
Trip #:	115
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/19/2008 11:38:28
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/19/2008 15:25:26	**Time:**	7/19/2008 15:32:00
Lat:	42.418323	**Lat:**	42.426455
Long:	-70.595237	**Long:**	-70.584567
Aft Draft:	18.69 ft	**Aft Draft:**	9.56 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/19/2008 11:15:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL63 was OPEN during the return transit of load #115. The sensor returned to the CLOSED position prior to returning to the dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_120221

ADISS Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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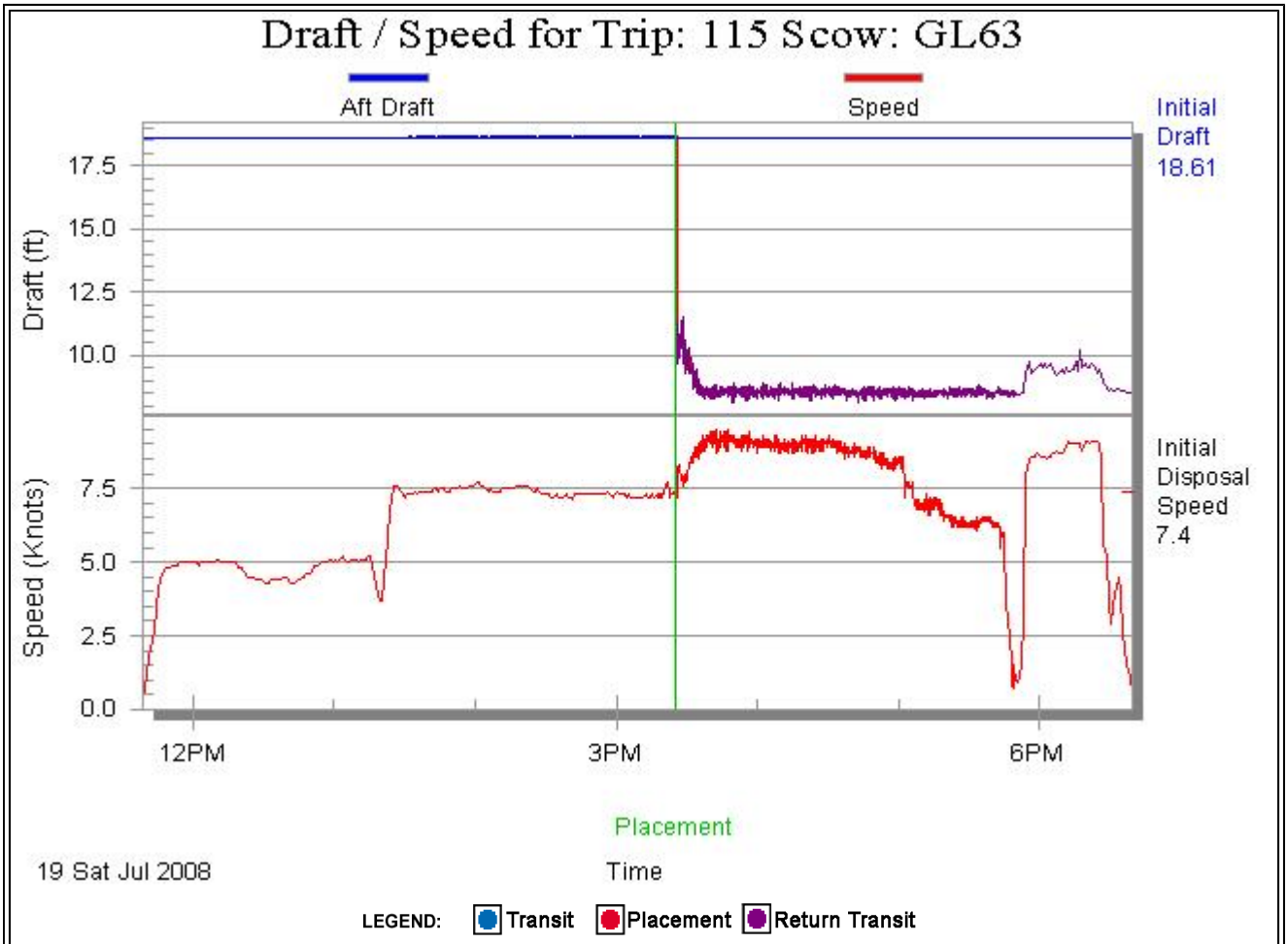


Trip Information

Trip #:	115
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/19/2008 11:38:28
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Placement Information:

Placement Start:		Placement End:	
Time:	7/19/2008 15:25:26	**Time:**	7/19/2008 15:32:00
Latitude:	42.418323	**Latitude:**	42.426455
Longitude:	-70.595237	**Longitude:**	-70.584567
Aft Draft:	18.69 ft	**Aft Draft:**	9.56 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL63 was OPEN during the return transit of load #115. The sensor returned to the CLOSED position prior to returning to the dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_120221

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

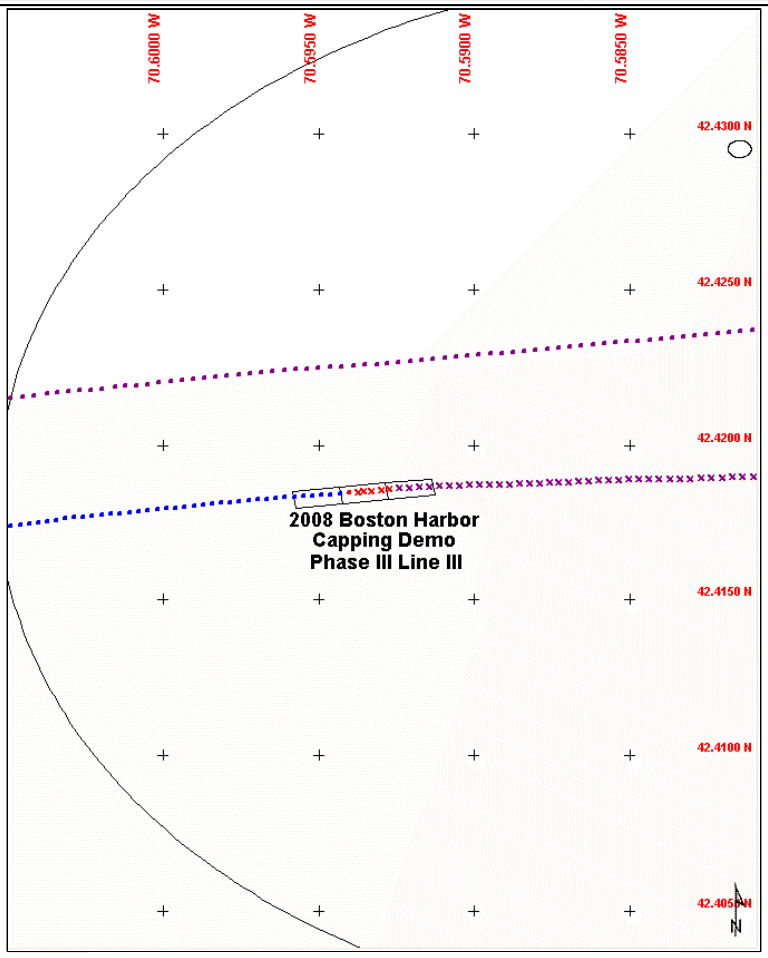
Trip #:	116
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/19/2008 19:09:43
Init Aft Draft:	20.47 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/19/2008 22:29:31	**Time:**	7/19/2008 22:29:58
Lat:	42.418439	**Lat:**	42.418553
Long:	-70.594046	**Long:**	-70.592695
Aft Draft:	20.40 ft	**Aft Draft:**	4.97 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/19/2008 6:45:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_120725

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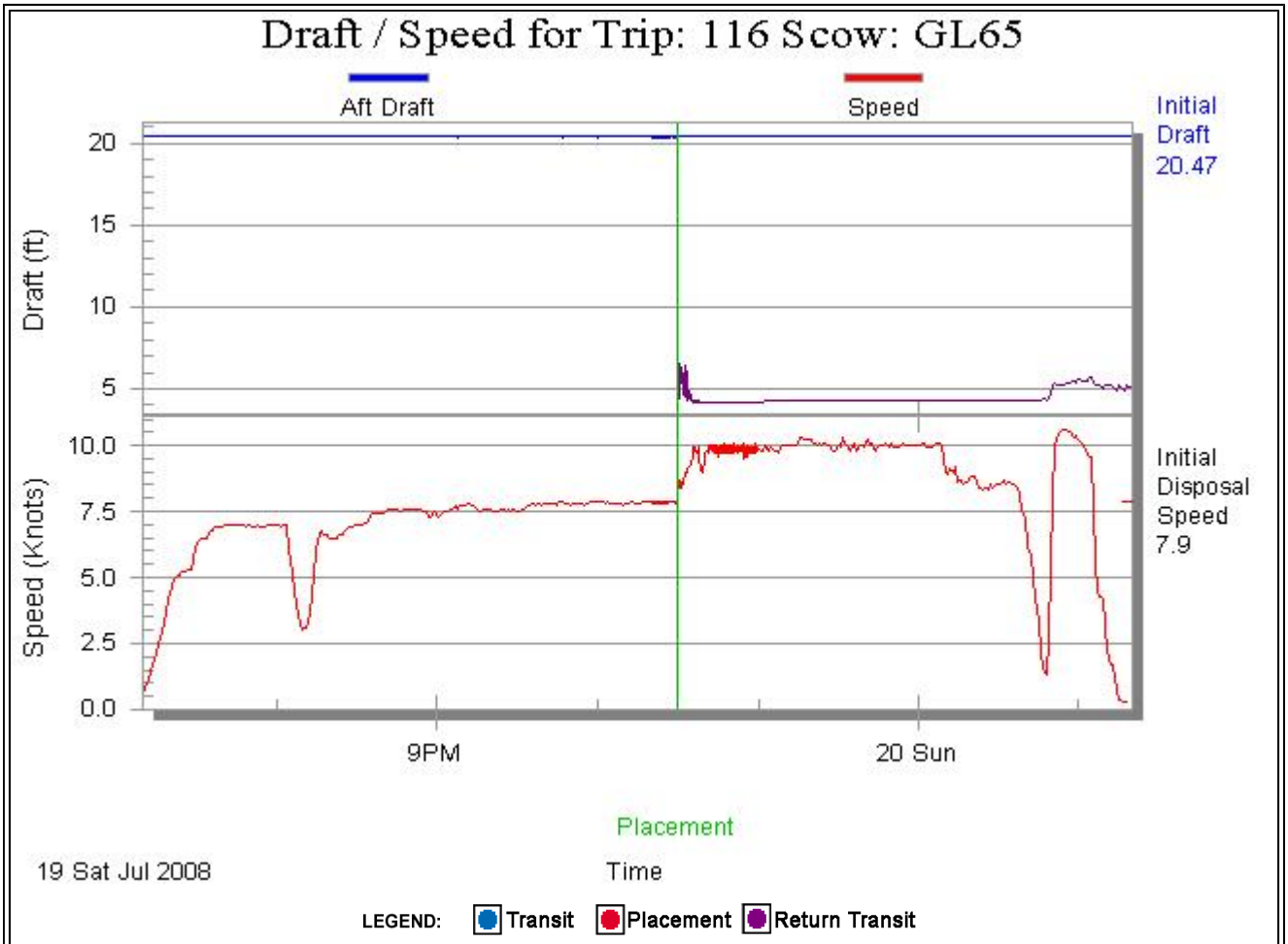


Trip Information

Trip #:	116
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/19/2008 19:09:43
Init Aft Draft:	20.47 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/19/2008 22:29:31
Latitude:	42.418439
Longitude:	-70.594046
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/19/2008 22:29:58
Latitude:	42.418553
Longitude:	-70.592695
Aft Draft:	4.97 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_120725

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

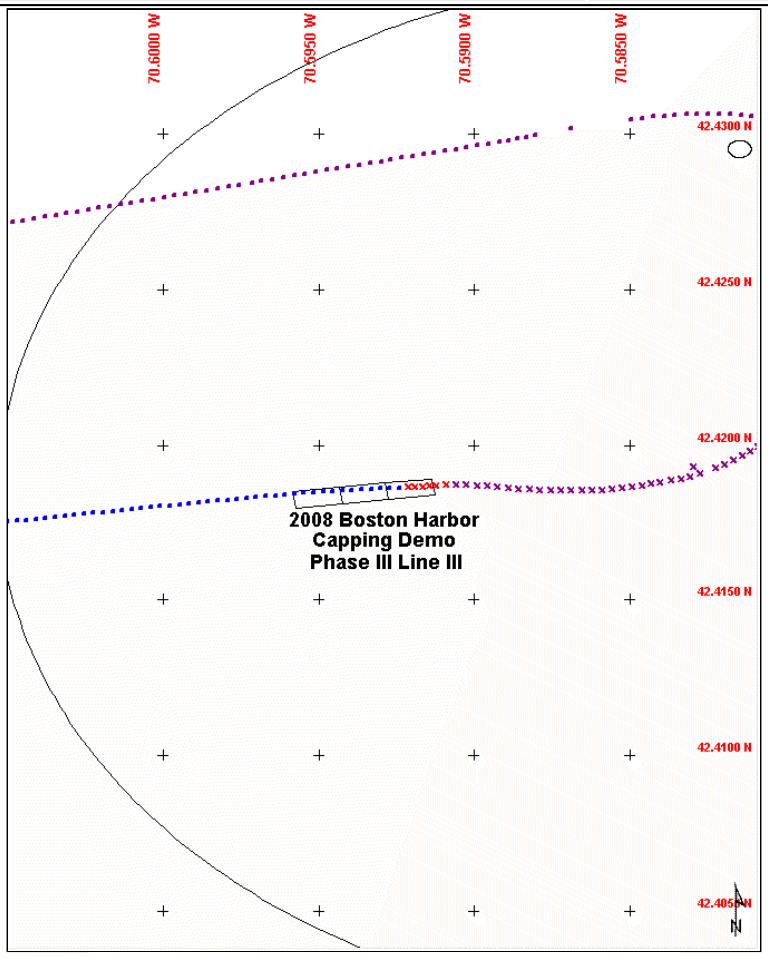
Trip #:	117
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/20/2008 03:39:16
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/20/2008 06:55:55	**Time:**	7/20/2008 06:56:18
Lat:	42.418616	**Lat:**	42.418689
Long:	-70.592097	**Long:**	-70.590899
Aft Draft:	18.53 ft	**Aft Draft:**	9.09 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/20/2008 3:18:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_121057

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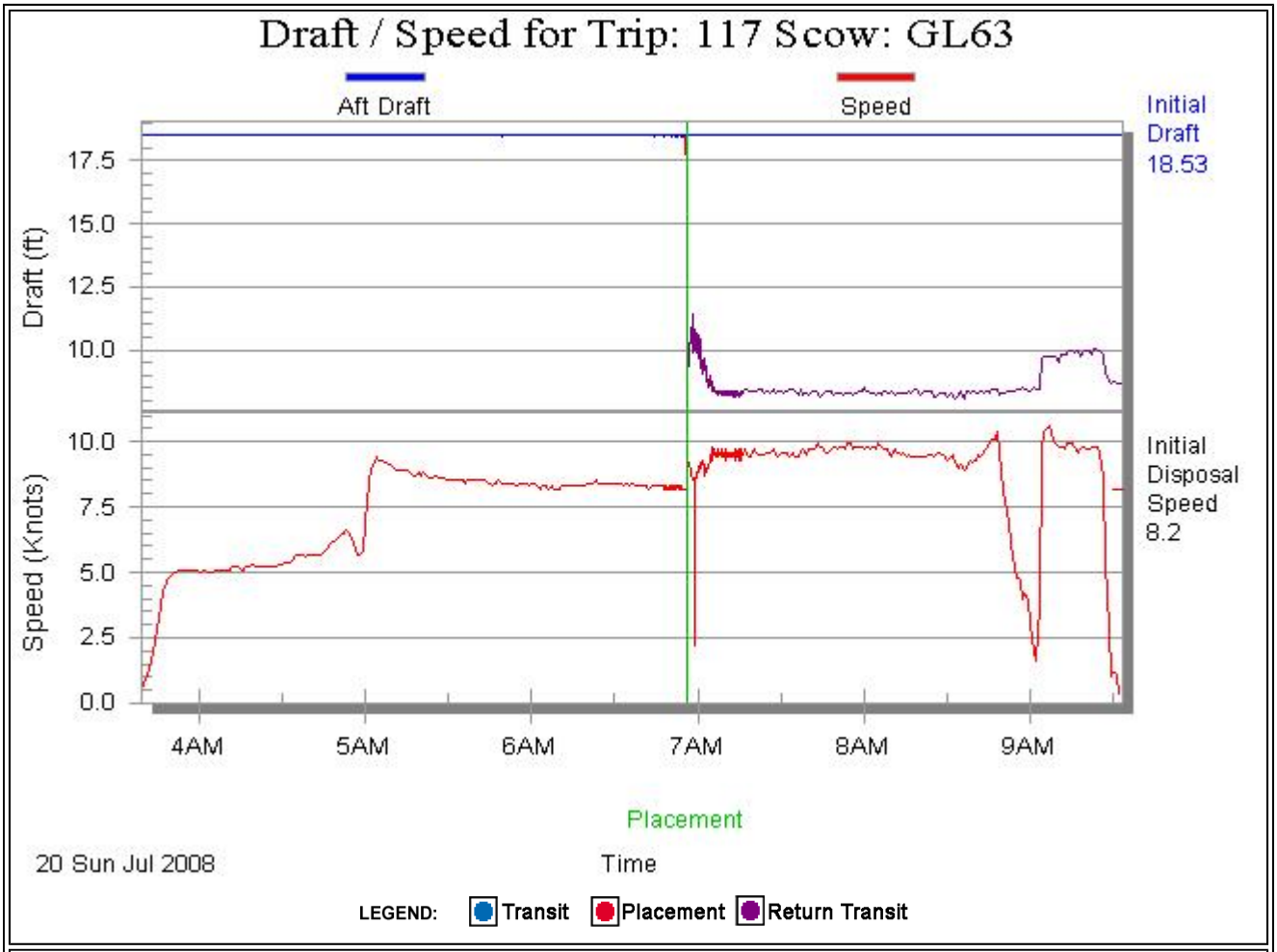


Trip Information

Trip #:	117
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/20/2008 03:39:16
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/20/2008 06:55:55
Latitude:	42.418616
Longitude:	-70.592097
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/20/2008 06:56:18
Latitude:	42.418689
Longitude:	-70.590899
Aft Draft:	9.09 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_121057

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

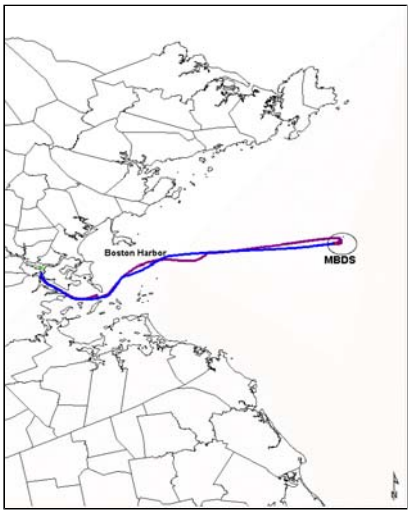
Trip Information:

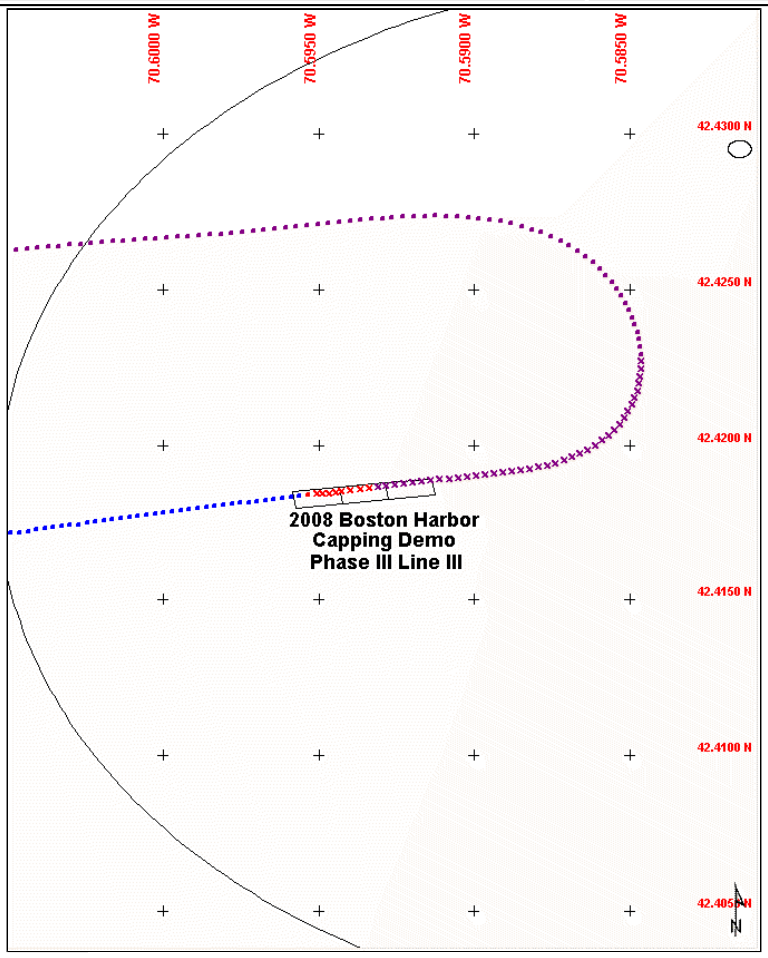
Trip #:	118
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6050 cu yd
Start Time:	7/20/2008 11:07:49
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/20/2008 14:53:12	**Time:**	7/20/2008 14:53:53
Lat:	42.418365	**Lat:**	42.418586
Long:	-70.595359	**Long:**	-70.593409
Aft Draft:	20.17 ft	**Aft Draft:**	4.89 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/20/2008 5:01:00 PM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072108_121811

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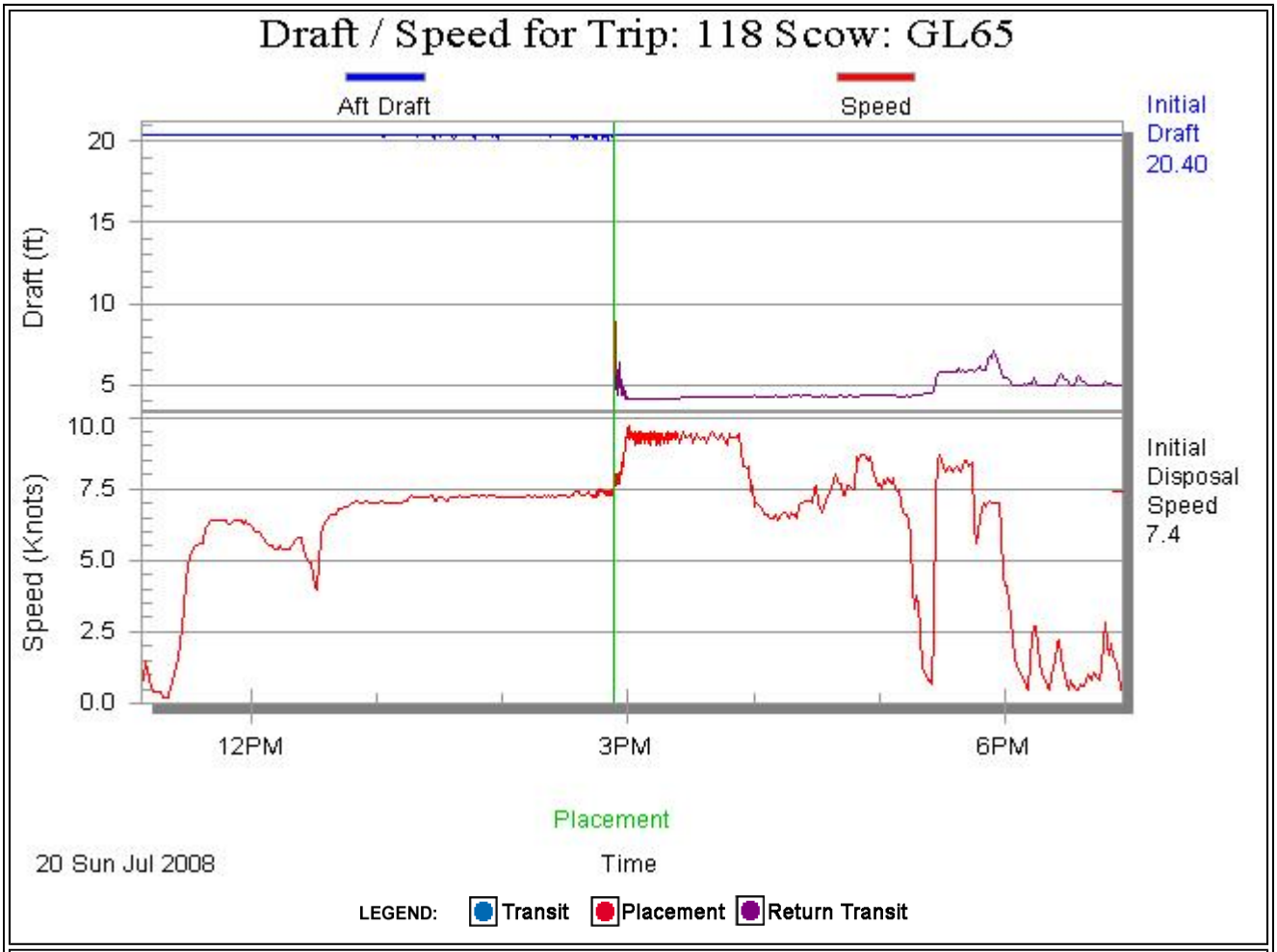


Trip Information

Trip #:	118
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6050 cu yd
Start Time:	7/20/2008 11:07:49
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/20/2008 14:53:12
Latitude:	42.418365
Longitude:	-70.595359
Aft Draft:	20.17 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/20/2008 14:53:53
Latitude:	42.418586
Longitude:	-70.593409
Aft Draft:	4.89 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072108_121811

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

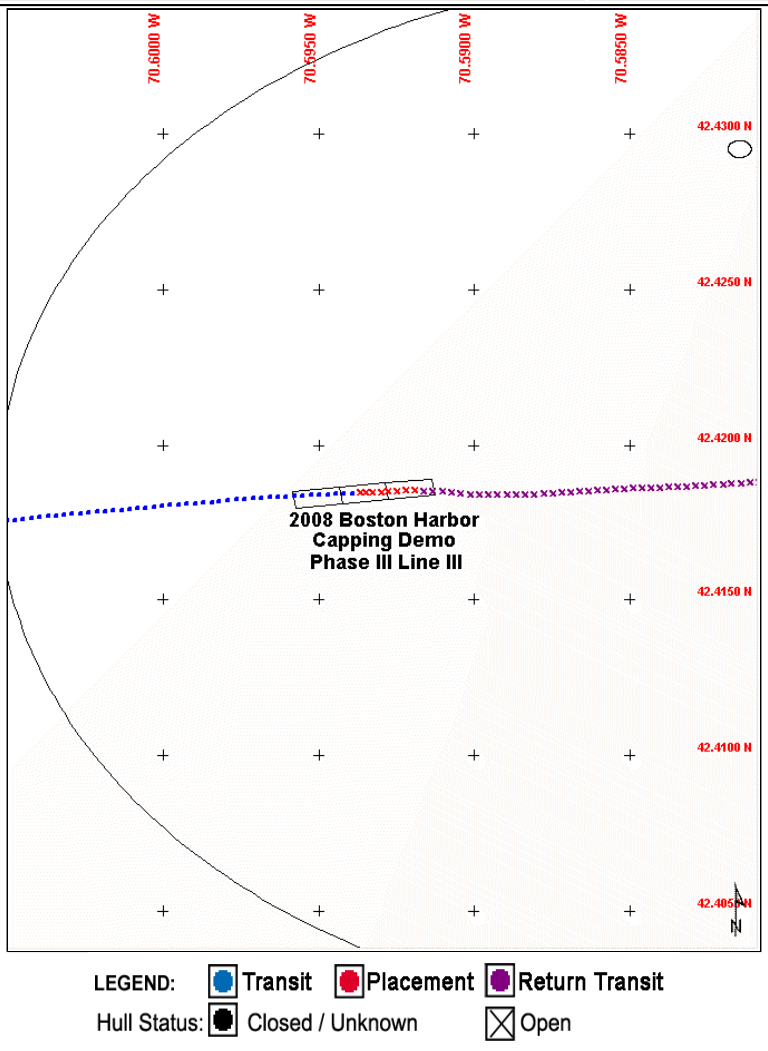
Trip #:	119
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/20/2008 22:11:09
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/21/2008 02:41:01	**Time:**	7/21/2008 02:41:40
Lat:	42.418437	**Lat:**	42.418513
Long:	-70.593673	**Long:**	-70.591893
Aft Draft:	18.45 ft	**Aft Draft:**	9.72 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/20/2008 9:40:00 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072208_133306

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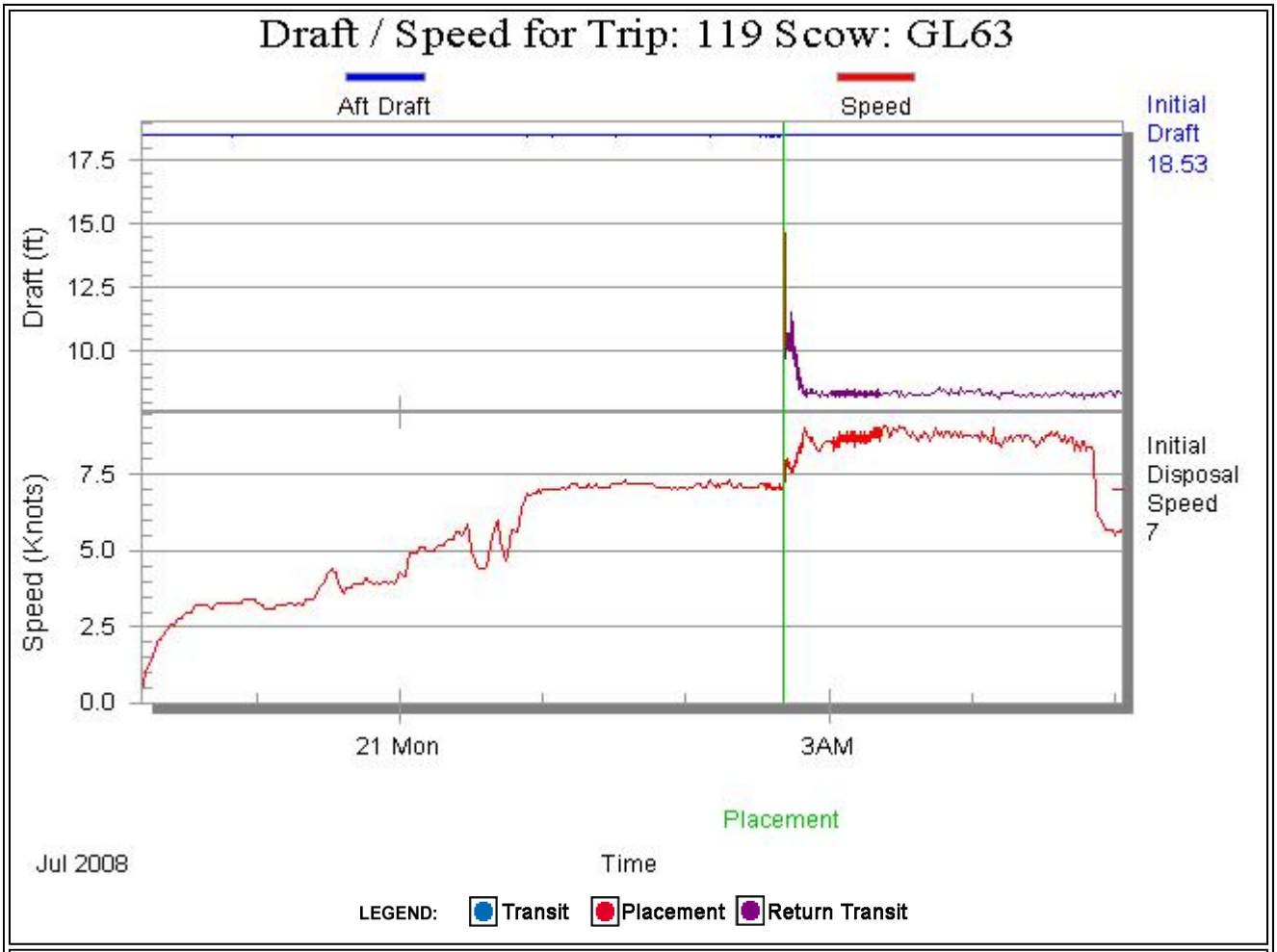


Trip Information

Trip #:	119
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/20/2008 22:11:09
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/21/2008 02:41:01
Latitude:	42.418437
Longitude:	-70.593673
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/21/2008 02:41:40
Latitude:	42.418513
Longitude:	-70.591893
Aft Draft:	9.72 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072208_133306

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

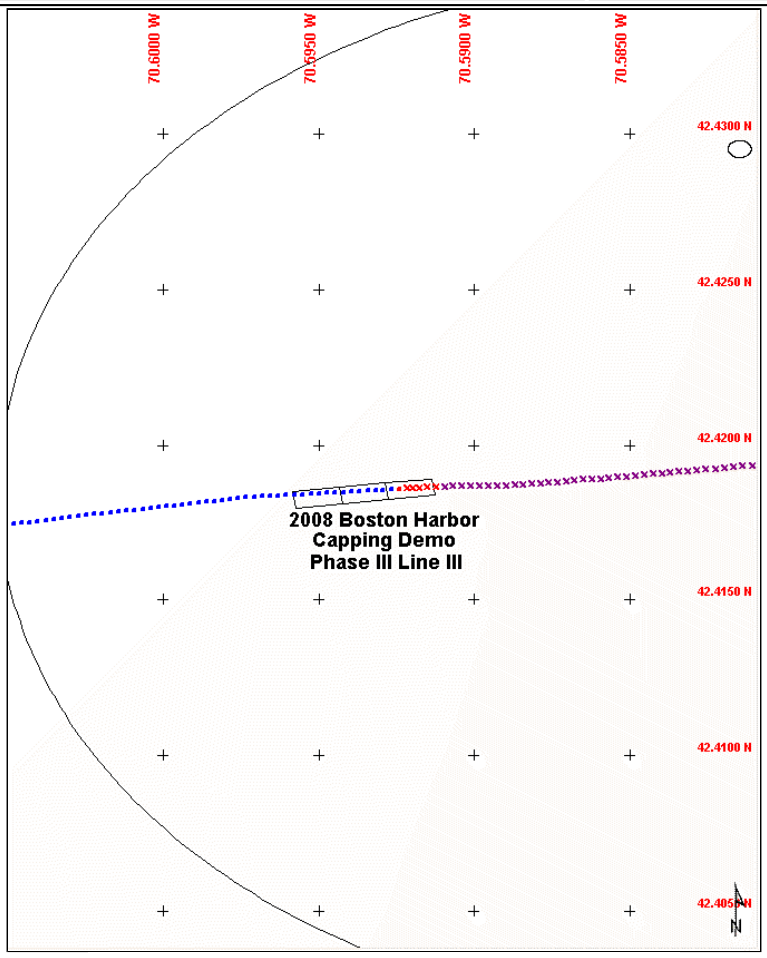
Trip #:	120
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/21/2008 10:43:20
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/21/2008 15:55:30	**Time:**	7/21/2008 15:55:57
Lat:	42.418560	**Lat:**	42.418624
Long:	-70.592401	**Long:**	-70.591217
Aft Draft:	20.40 ft	**Aft Draft:**	5.93 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/21/2008 10:34:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072208_134452

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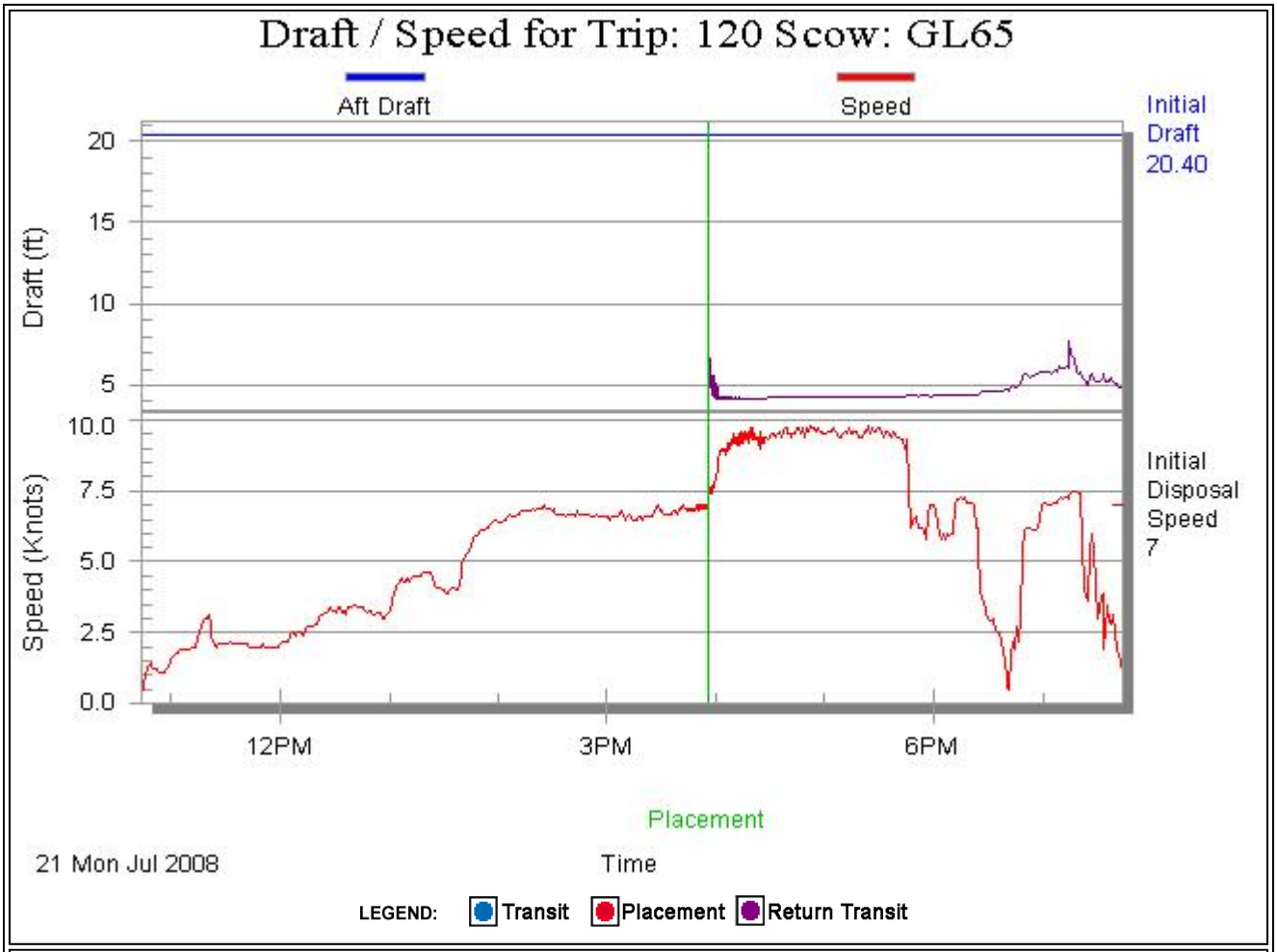


Trip Information

Trip #:	120
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/21/2008 10:43:20
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/21/2008 15:55:30
Latitude:	42.418560
Longitude:	-70.592401
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/21/2008 15:55:57
Latitude:	42.418624
Longitude:	-70.591217
Aft Draft:	5.93 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072208_134452

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

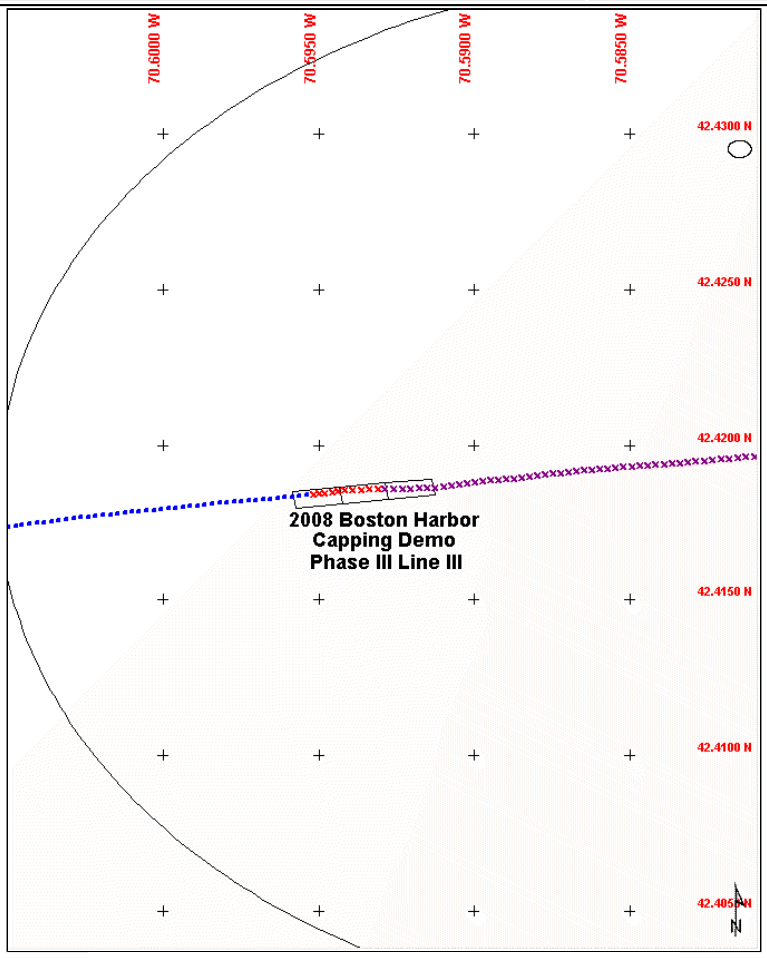
Trip #:	121
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/21/2008 20:09:39
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/22/2008 00:40:49	**Time:**	7/22/2008 00:41:38
Lat:	42.418387	**Lat:**	42.418550
Long:	-70.595166	**Long:**	-70.593117
Aft Draft:	18.53 ft	**Aft Draft:**	9.01 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/21/2008 7:36:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072208_140045

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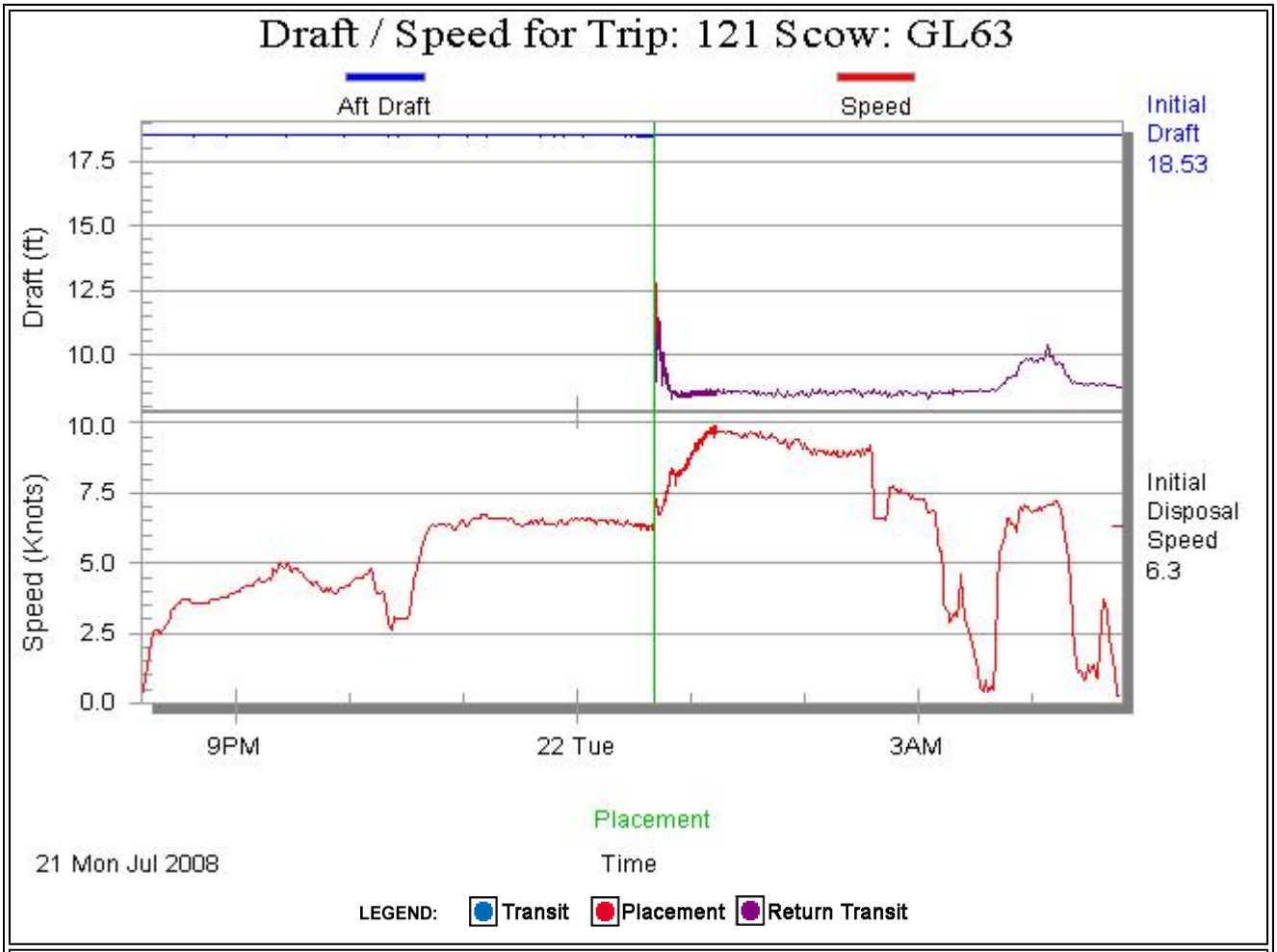


Trip Information

Trip #:	121
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	7/21/2008 20:09:39
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/22/2008 00:40:49
Latitude:	42.418387
Longitude:	-70.595166
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/22/2008 00:41:38
Latitude:	42.418550
Longitude:	-70.593117
Aft Draft:	9.01 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072208_140045

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

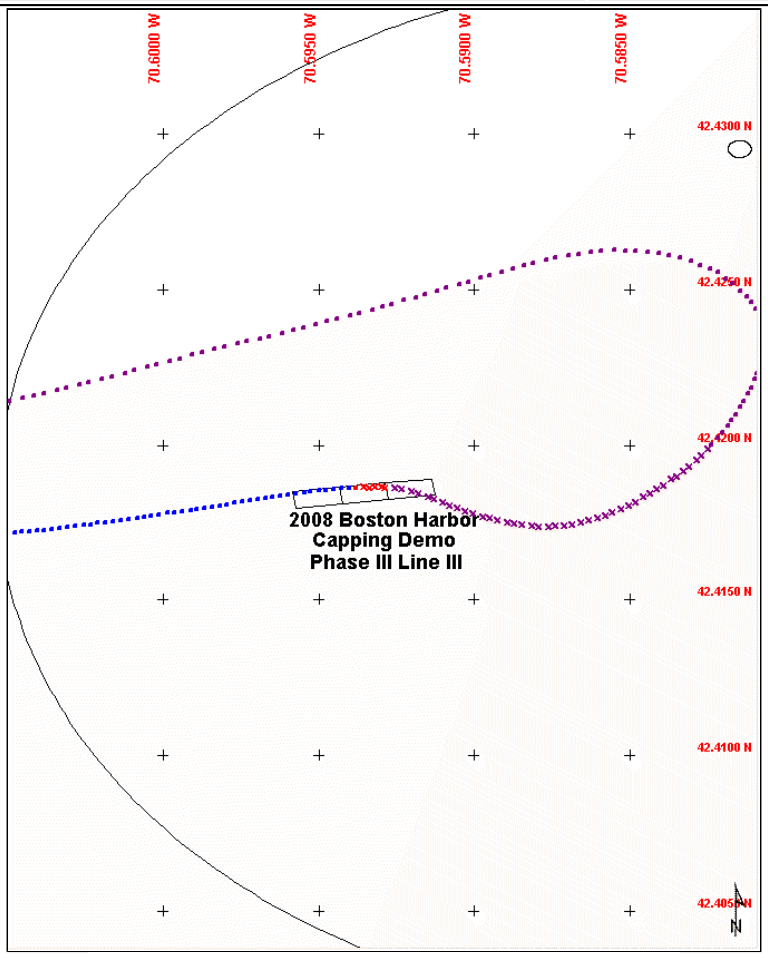
Trip #:	122
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/22/2008 05:13:46
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/22/2008 09:04:41	**Time:**	7/22/2008 09:05:04
Lat:	42.418607	**Lat:**	42.418609
Long:	-70.593809	**Long:**	-70.592846
Aft Draft:	20.32 ft	**Aft Draft:**	4.89 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/22/2008 5:27:00 AM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072208_135329

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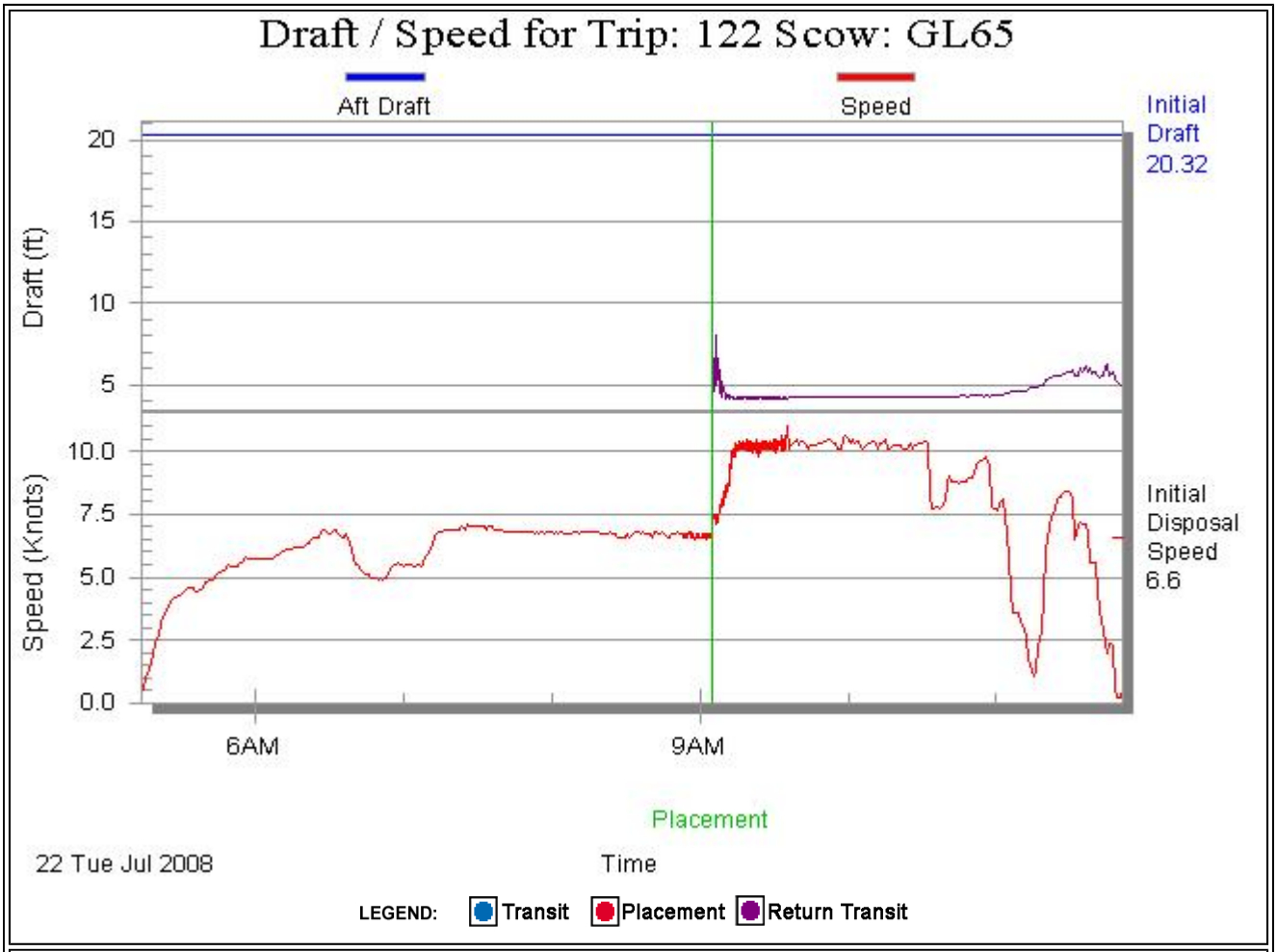


Trip Information

Trip #:	122
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	7/22/2008 05:13:46
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/22/2008 09:04:41
Latitude:	42.418607
Longitude:	-70.593809
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/22/2008 09:05:04
Latitude:	42.418609
Longitude:	-70.592846
Aft Draft:	4.89 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072208_135329

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

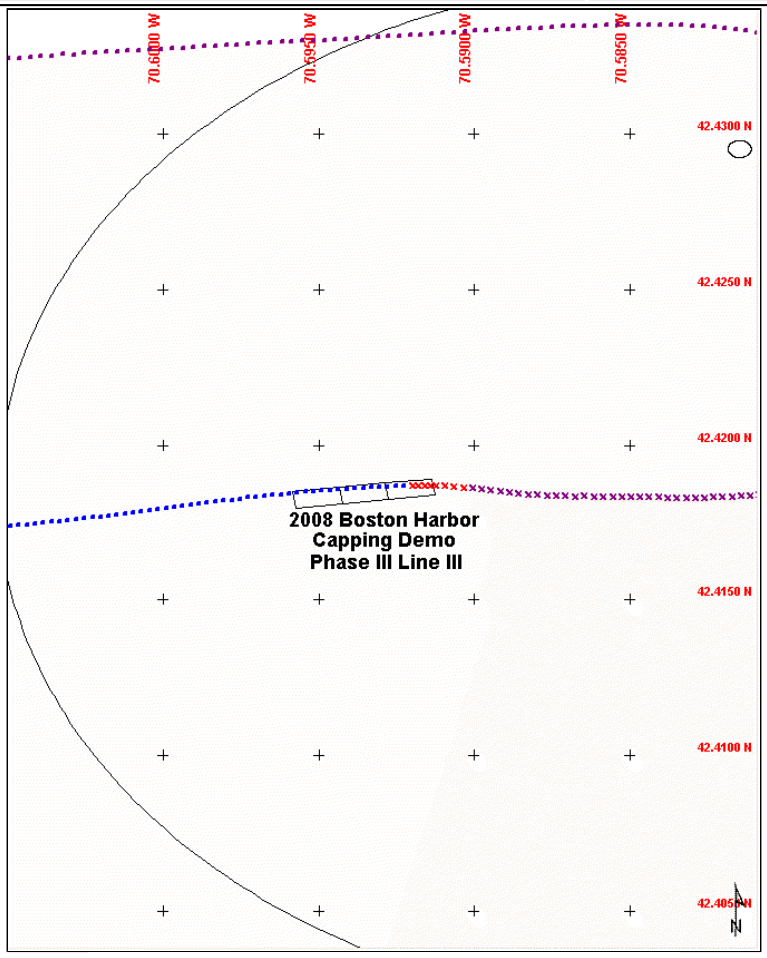
Trip #:	123
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	7/22/2008 15:49:08
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/22/2008 19:53:18	**Time:**	7/22/2008 19:53:53
Lat:	42.418671	**Lat:**	42.418610
Long:	-70.591982	**Long:**	-70.590328
Aft Draft:	18.53 ft	**Aft Draft:**	8.93 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/22/2008 3:49:00 PM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072308_103746

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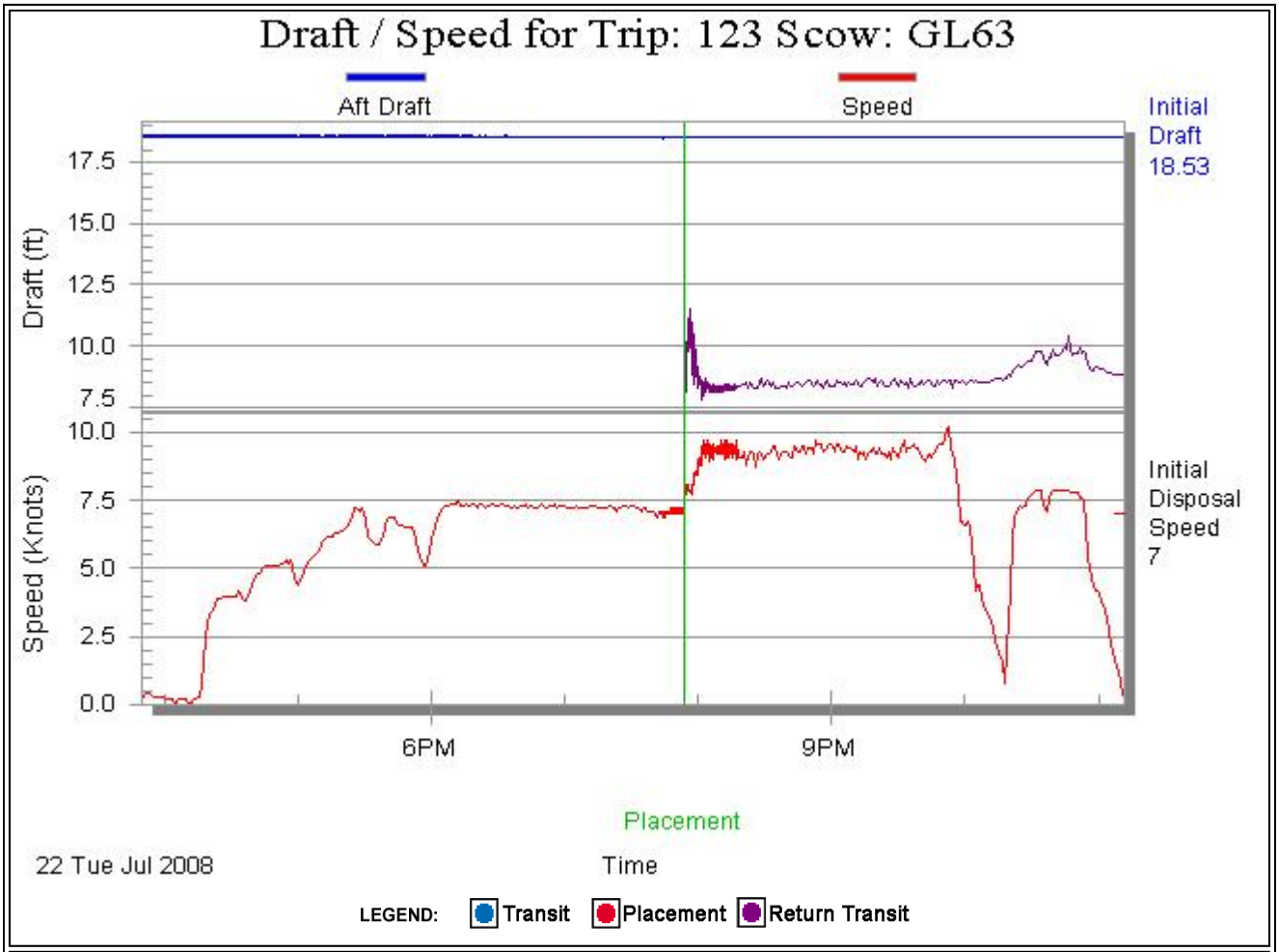


Trip Information

Trip #:	123
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	7/22/2008 15:49:08
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/22/2008 19:53:18
Latitude:	42.418671
Longitude:	-70.591982
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/22/2008 19:53:53
Latitude:	42.418610
Longitude:	-70.590328
Aft Draft:	8.93 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072308_103746

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

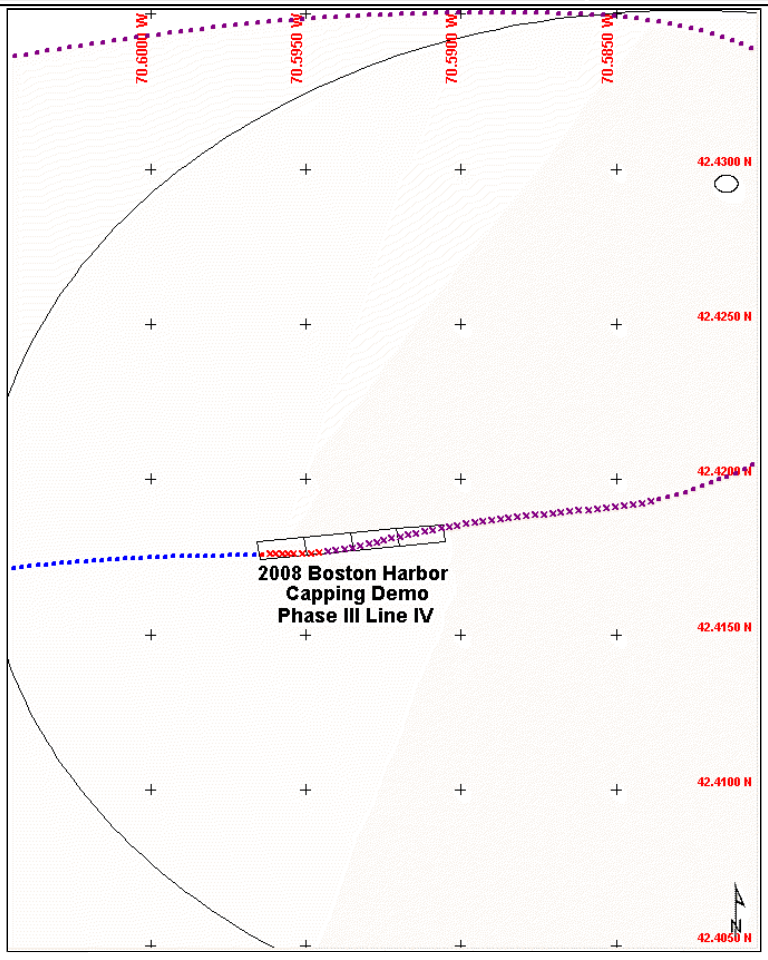
Trip #:	124
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/22/2008 23:43:57
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/23/2008 03:35:41	**Time:**	7/23/2008 03:36:22
Lat:	42.417577	**Lat:**	42.417635
Long:	-70.596410	**Long:**	-70.594568
Aft Draft:	19.51 ft	**Aft Draft:**	5.19 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/22/2008 11:11:00 PM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 072308_104546

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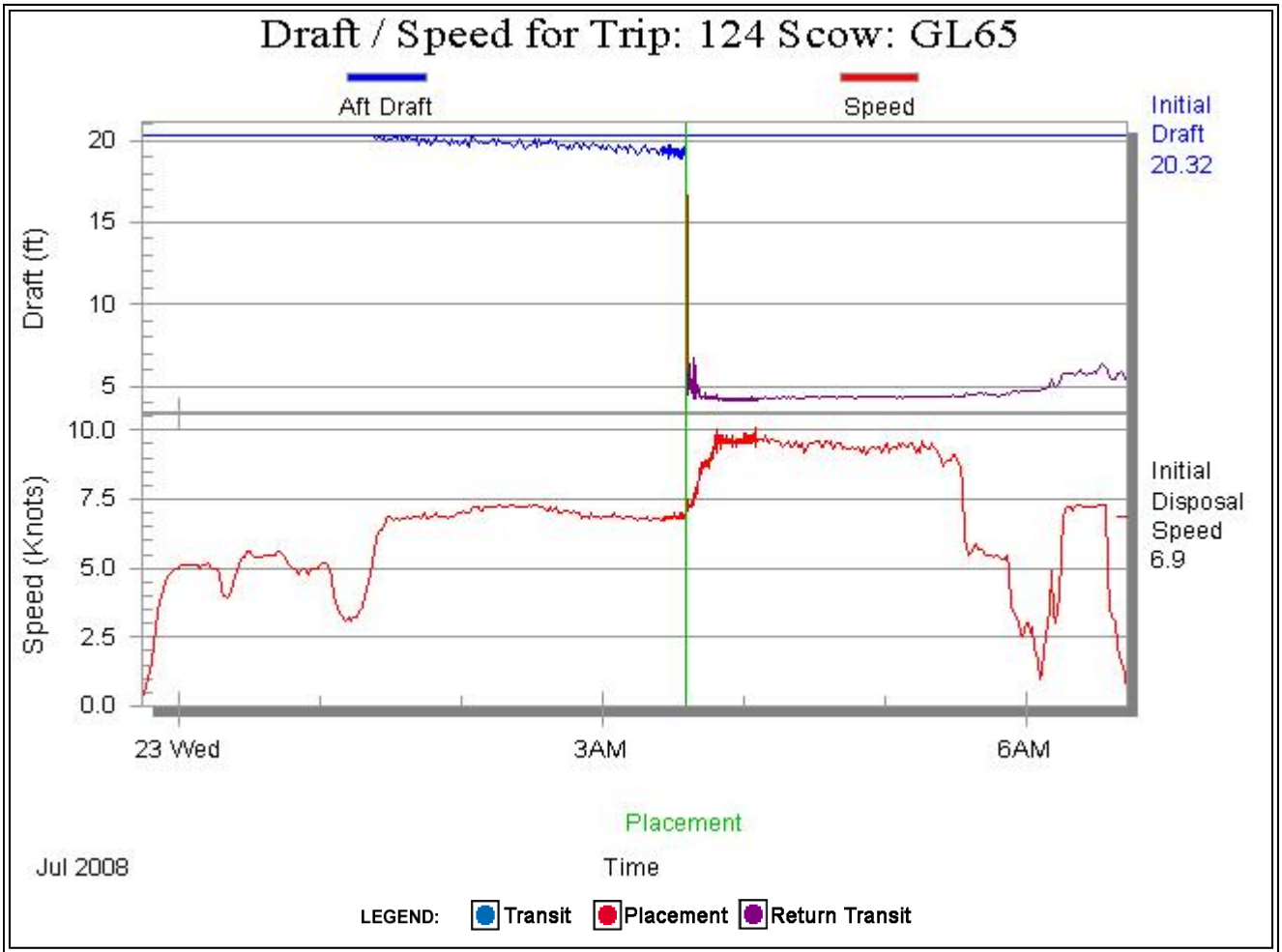

Trip Information

Trip #:	124
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	7/22/2008 23:43:57
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	7/23/2008 03:35:41
Latitude:	42.417577
Longitude:	-70.596410
Aft Draft:	19.51 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	7/23/2008 03:36:22
Latitude:	42.417635
Longitude:	-70.594568
Aft Draft:	5.19 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 072308_104546

2008 Boston Harbor Maintenance Dredging
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Trip Information:

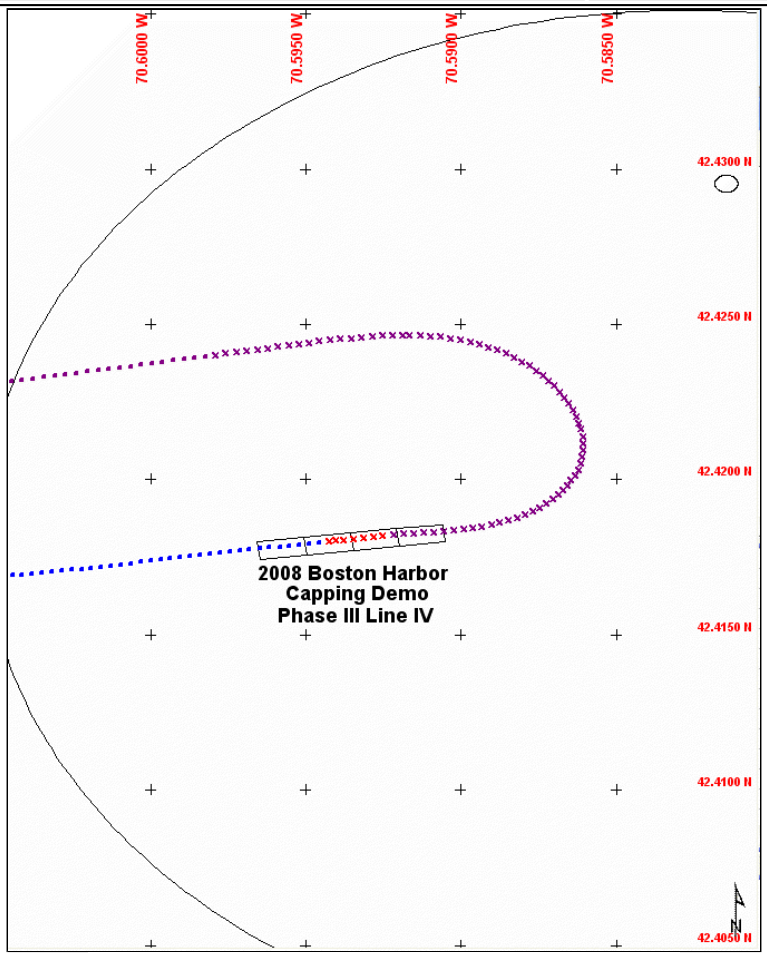
Trip #:	125
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5300 cu yd
Start Time:	7/31/2008 18:27:14
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	7/31/2008 22:53:57	7/31/2008 22:54:30
Lat:	42.417993	42.418180
Long:	-70.594260	-70.592488
Aft Draft:	18.53 ft	10.44 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 7/31/2008 9:35:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013

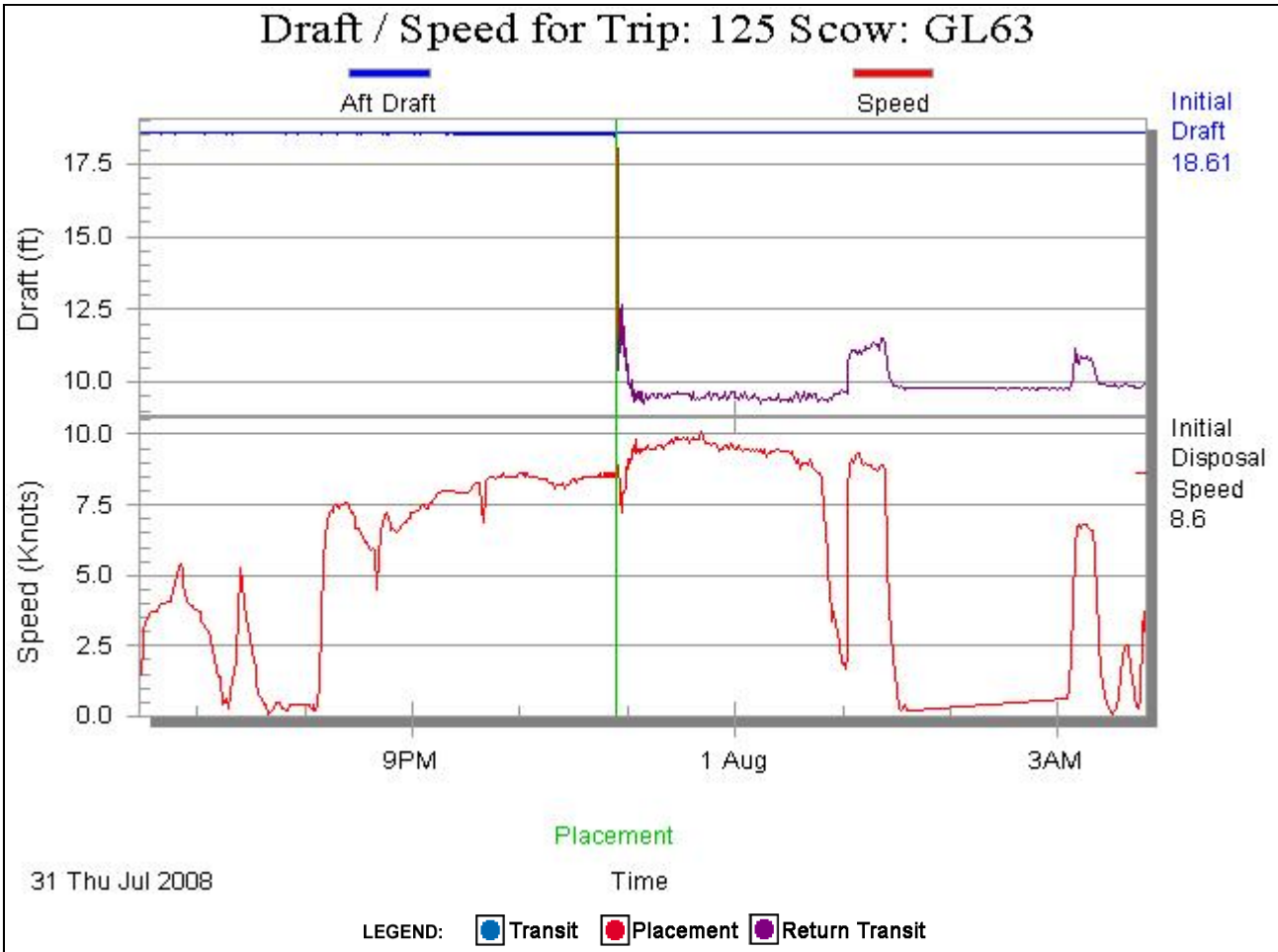




LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	125
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5300 cu yd
Start Time:	7/31/2008 18:27:14
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	7/31/2008 22:53:57	**Time:**	7/31/2008 22:54:30
Latitude:	42.417993	**Latitude:**	42.418180
Longitude:	-70.594260	**Longitude:**	-70.592488
Aft Draft:	18.53 ft	**Aft Draft:**	10.44 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080108_170341

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

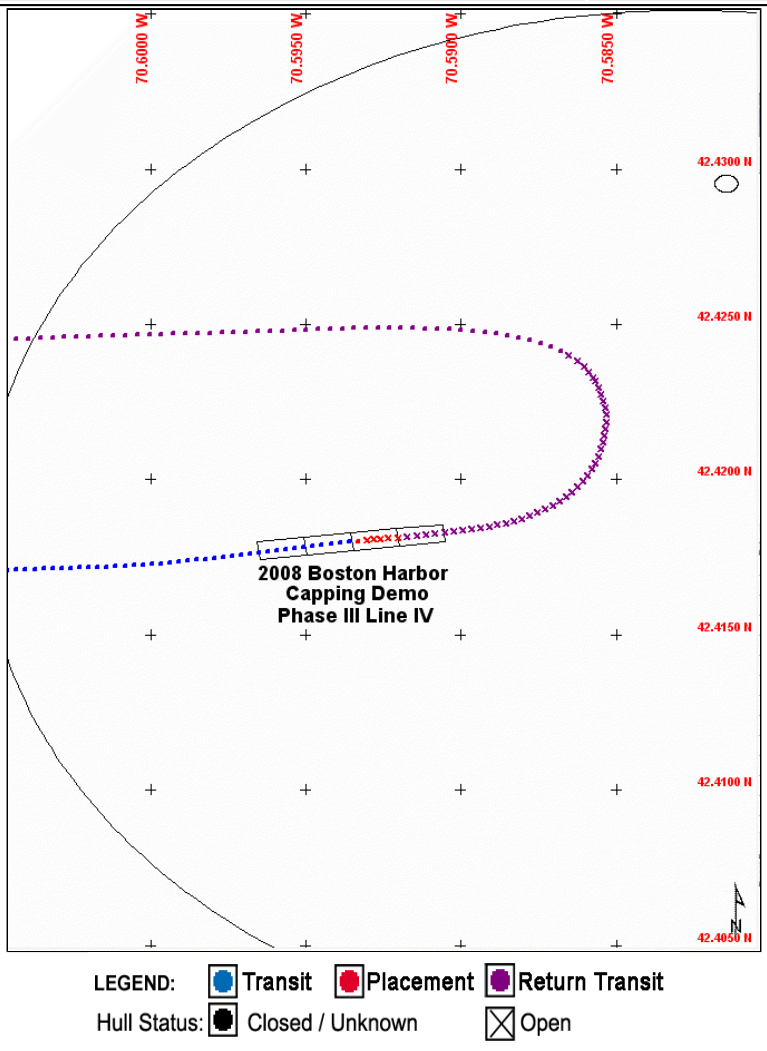
Trip #:	126
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/1/2008 04:12:59
Init Aft Draft:	20.10 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/1/2008 07:15:13	**Time:**	8/1/2008 07:15:40
Lat:	42.418003	**Lat:**	42.418092
Long:	-70.593327	**Long:**	-70.592004
Aft Draft:	18.62 ft	**Aft Draft:**	4.75 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

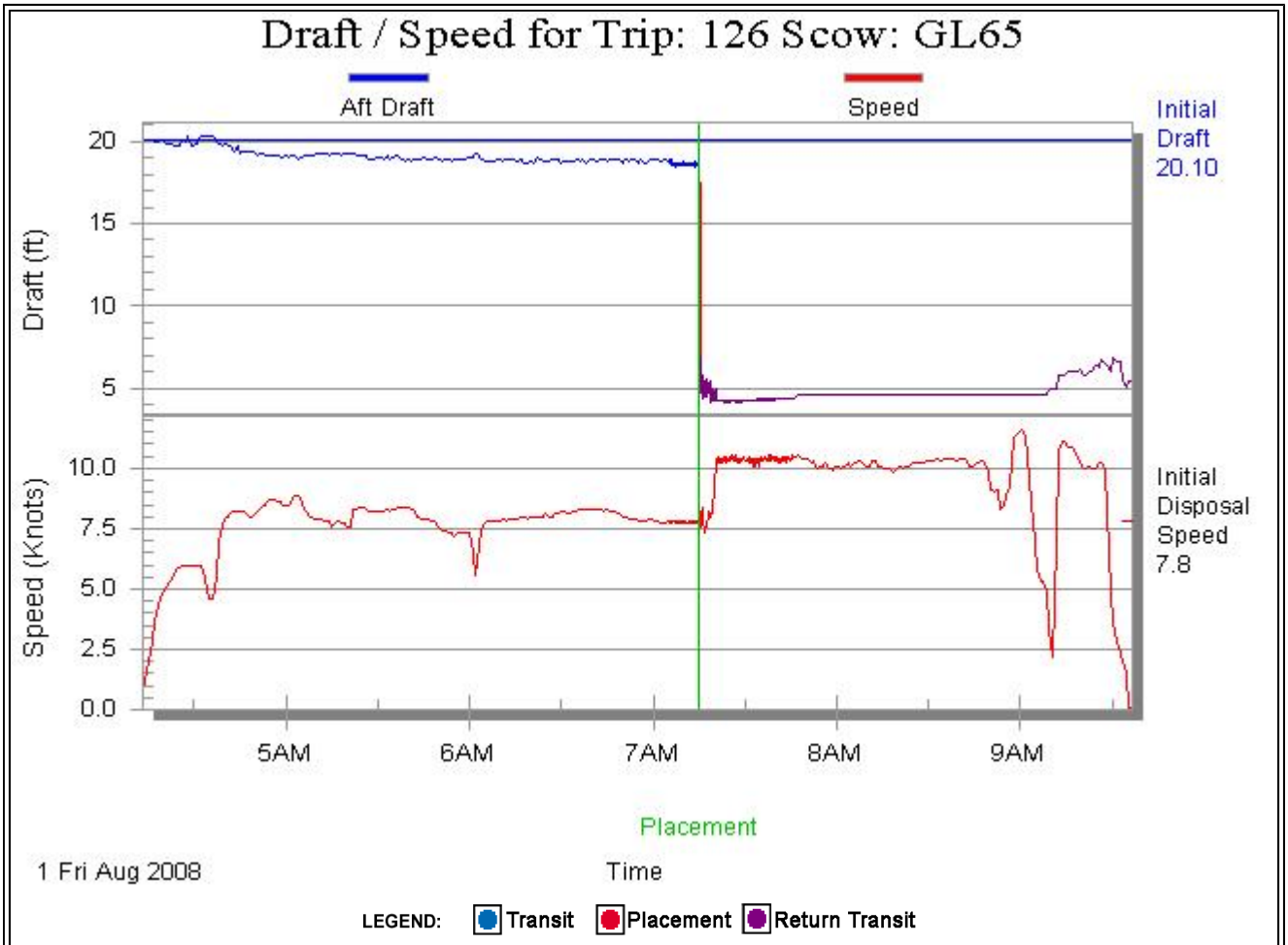
Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/1/2008 3:57:00 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	126
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/1/2008 04:12:59
Init Aft Draft:	20.10 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/1/2008 07:15:13
Latitude:	42.418003
Longitude:	-70.593327
Aft Draft:	18.62 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/1/2008 07:15:40
Latitude:	42.418092
Longitude:	-70.592004
Aft Draft:	4.75 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080108_170254

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

From Science to Solutions™

Trip Information:

Trip #:	127
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/1/2008 12:18:45
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

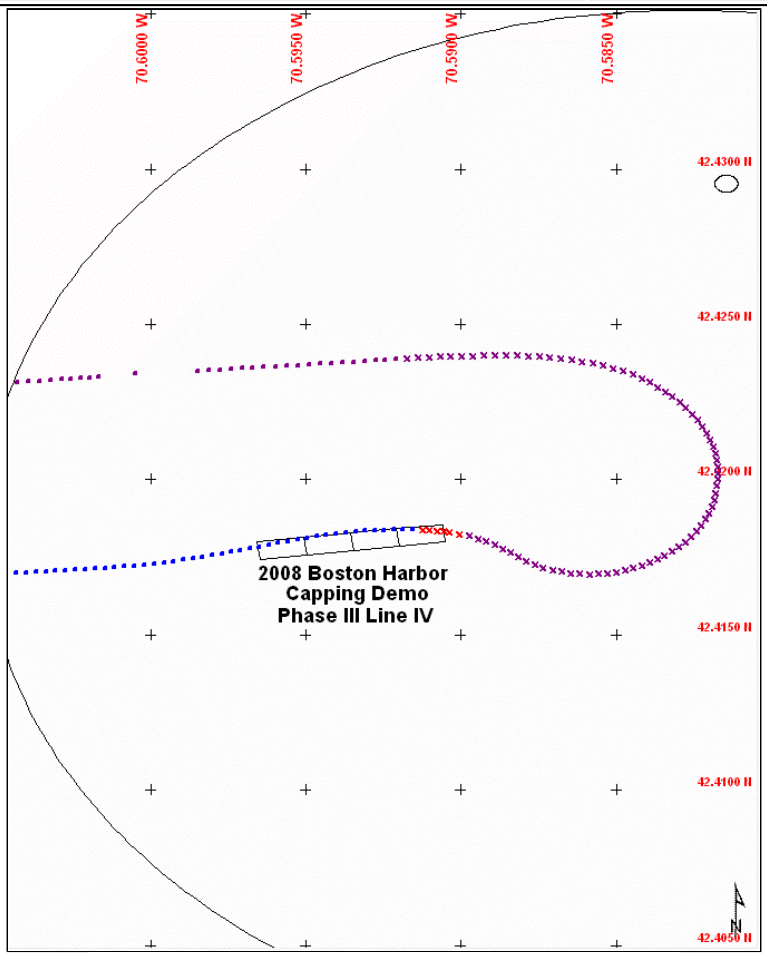
	Placement Start:	Placement End:
Time:	8/1/2008 15:12:56	8/1/2008 15:13:19
Lat:	42.418361	42.418217
Long:	-70.591214	-70.590031
Aft Draft:	18.61 ft	11.39 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/1/2008 12:04:00 PM (Local)

Wave Height: 1.3 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



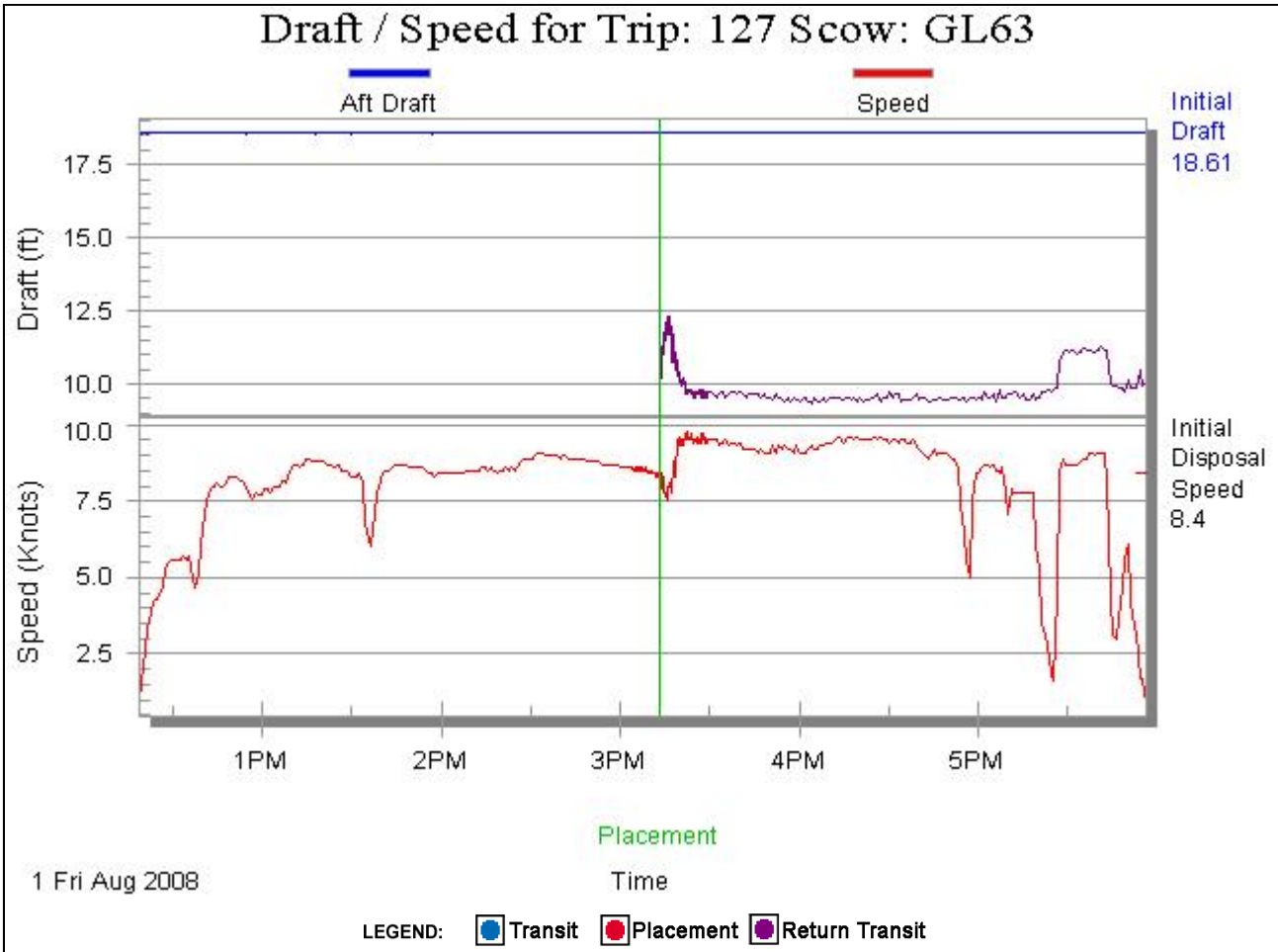


LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	127
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/1/2008 12:18:45
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/1/2008 15:12:56
Latitude:	42.418361
Longitude:	-70.591214
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/1/2008 15:13:19
Latitude:	42.418217
Longitude:	-70.590031
Aft Draft:	11.39 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080408_120517

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

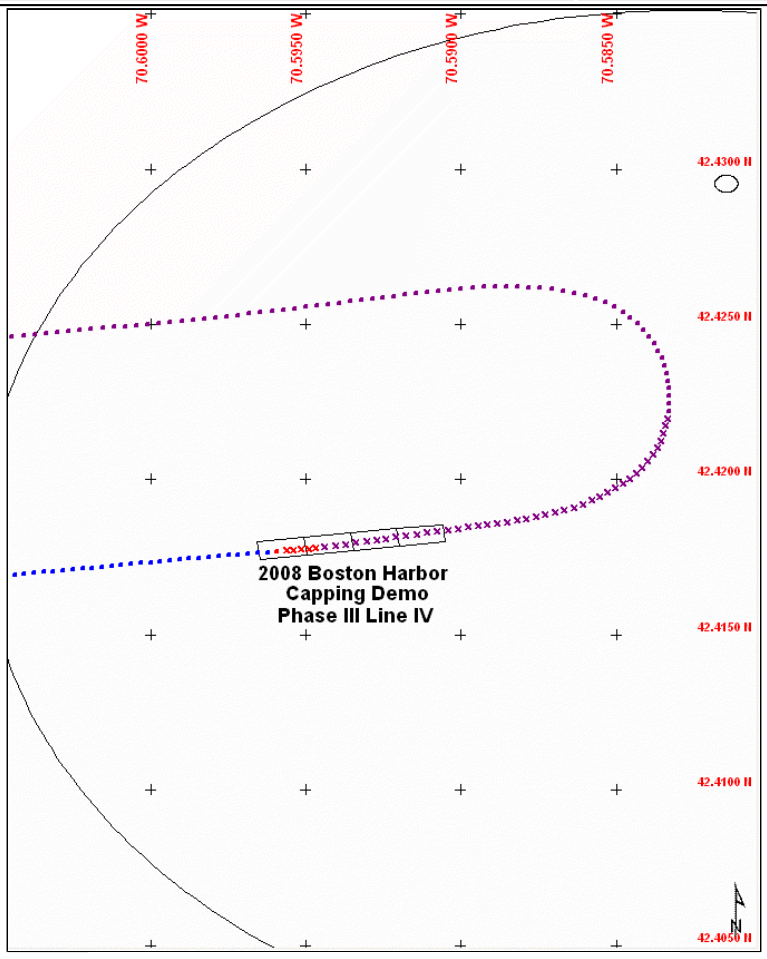
Trip #:	128
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/1/2008 21:01:15
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	8/2/2008 00:16:06	8/2/2008 00:16:29
Lat:	42.417681	42.417765
Long:	-70.595923	-70.594707
Aft Draft:	18.55 ft	4.82 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/1/2008 8:44:00 PM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013

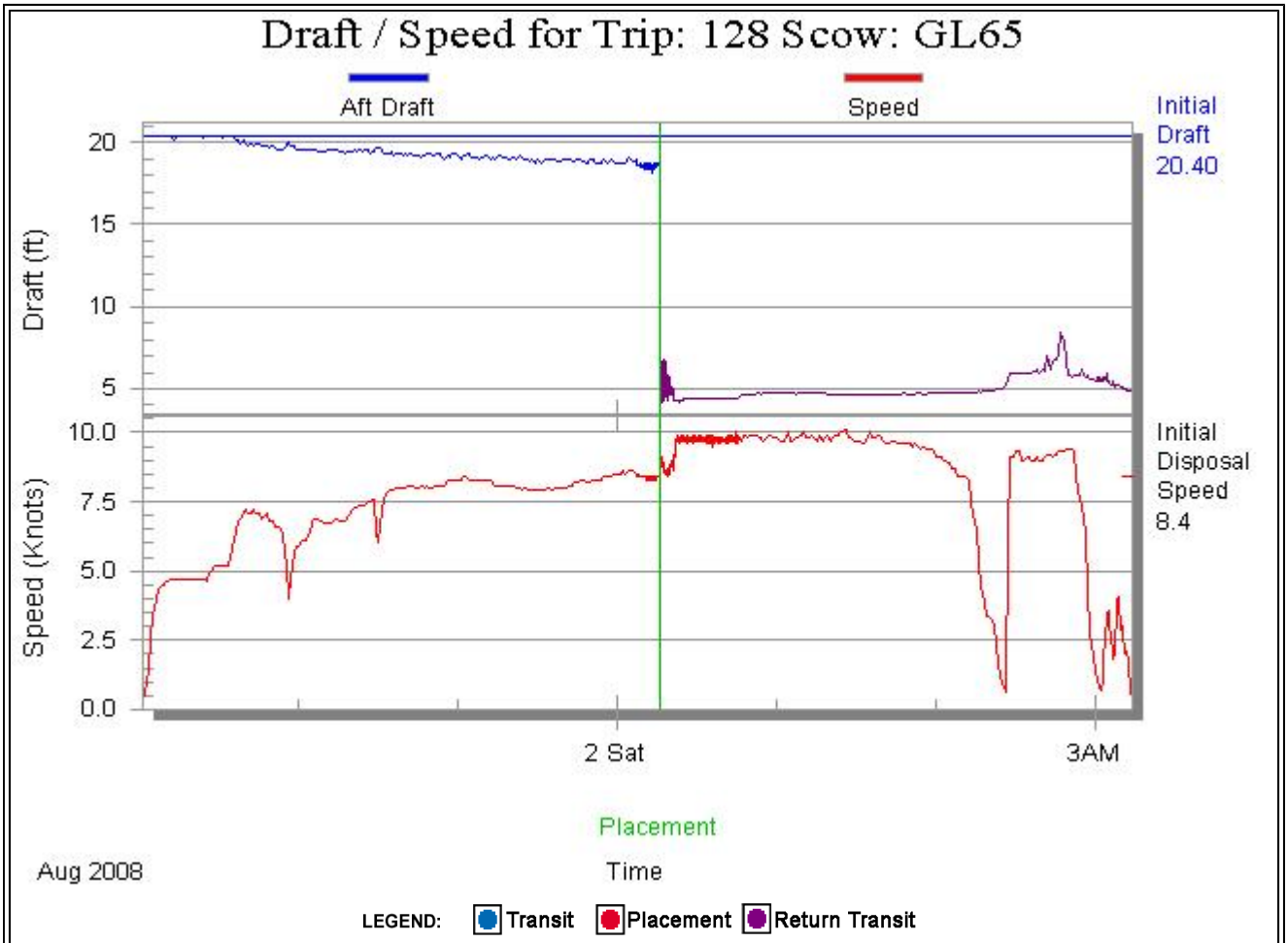




LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. During the outbound transit for load

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	128
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/1/2008 21:01:15
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/2/2008 00:16:06	**Time:**	8/2/2008 00:16:29
Latitude:	42.417681	**Latitude:**	42.417765
Longitude:	-70.595923	**Longitude:**	-70.594707
Aft Draft:	18.55 ft	**Aft Draft:**	4.82 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. During the outbound transit for load #128 with the GL65, a change in draft of approximately 1.8 feet was observed. The change in draft started at 9:35 PM (Local) on 8/1/08 with a draft of 20.39 feet and ended at 12:08 AM (Local) on 8/2/08 with a draft of 18.55 feet.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

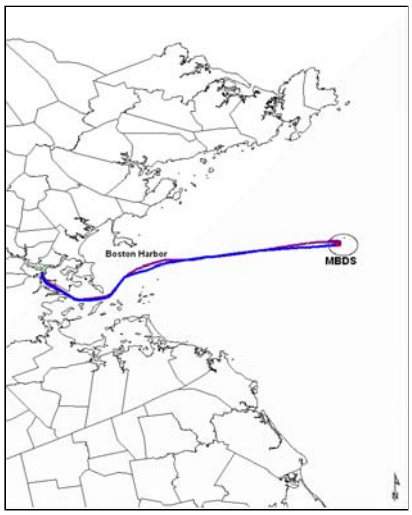
Trip Information:

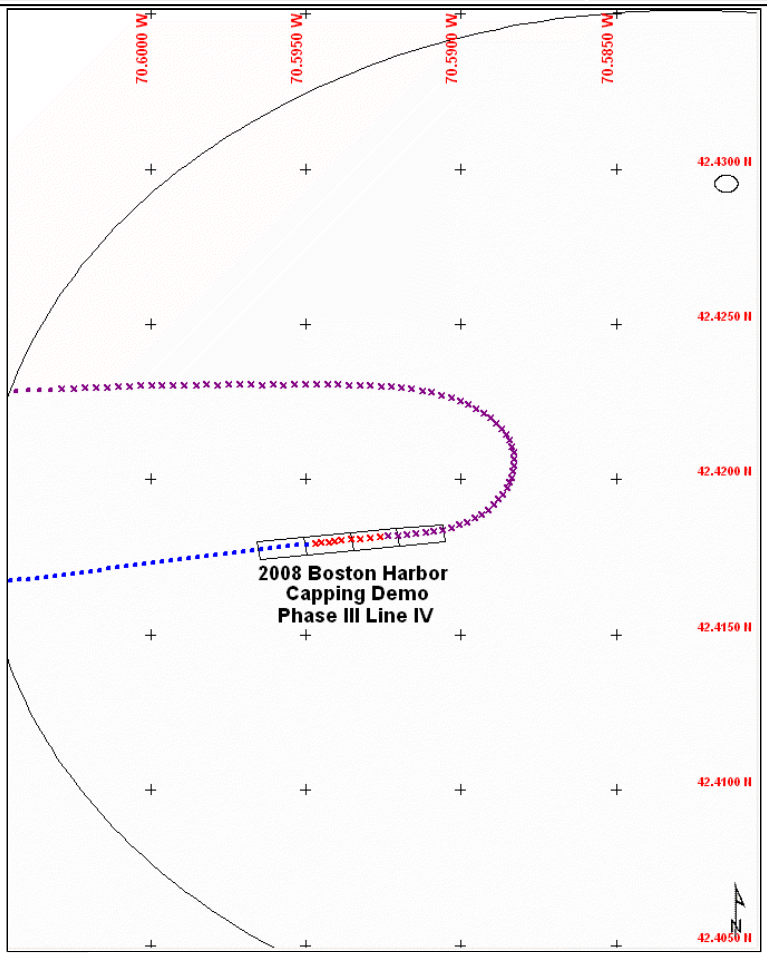
Trip #:	129
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/2/2008 03:33:10
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	8/2/2008 06:36:20	8/2/2008 06:37:01
Lat:	42.417932	42.418136
Long:	-70.594700	-70.592632
Aft Draft:	18.53 ft	10.59 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/2/2008 3:19:00 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013

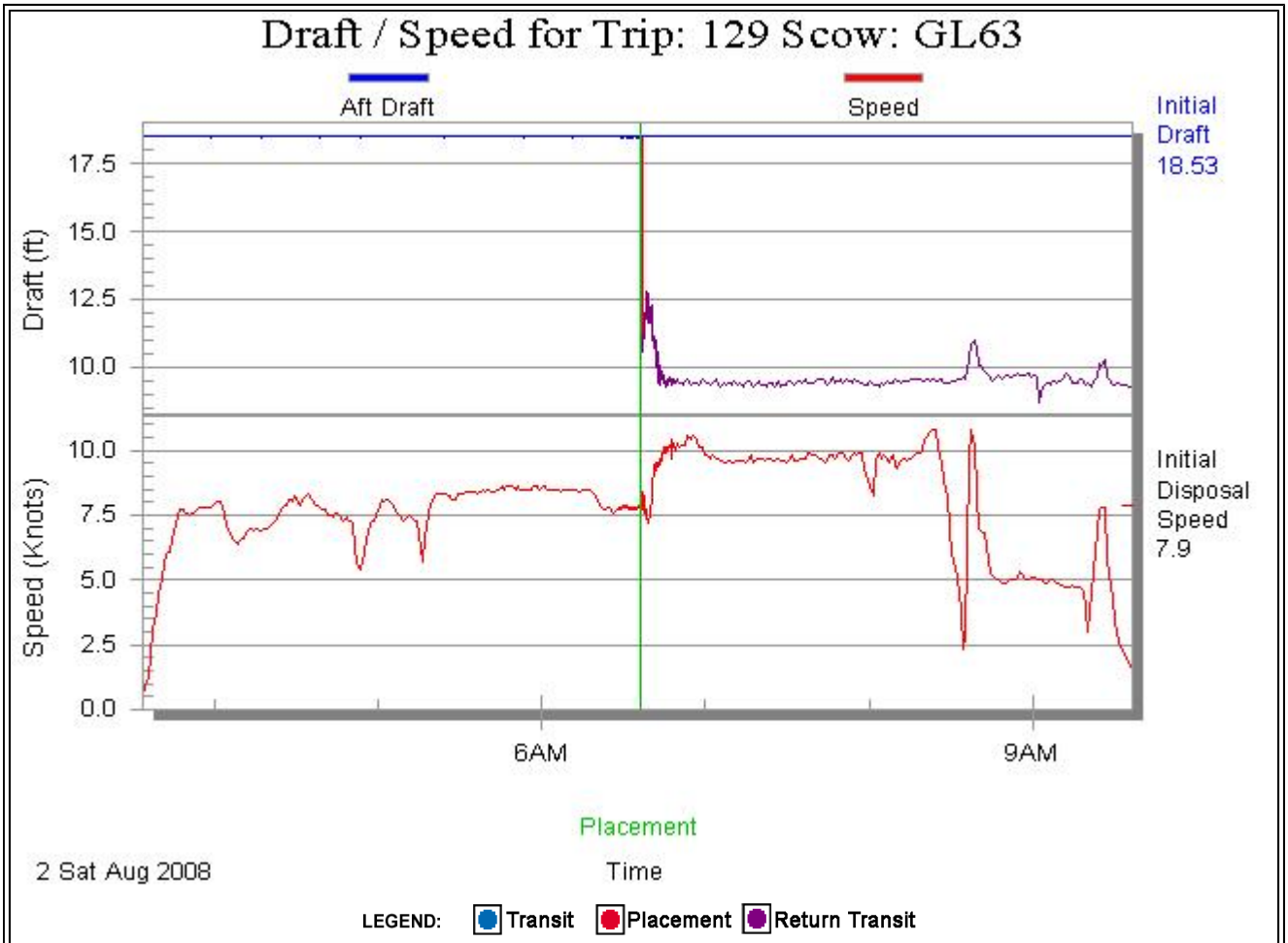




LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	129
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/2/2008 03:33:10
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/2/2008 06:36:20	**Time:**	8/2/2008 06:37:01
Latitude:	42.417932	**Latitude:**	42.418136
Longitude:	-70.594700	**Longitude:**	-70.592632
Aft Draft:	18.53 ft	**Aft Draft:**	10.59 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080408_121039

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

From Science to Solutions™

Trip Information:

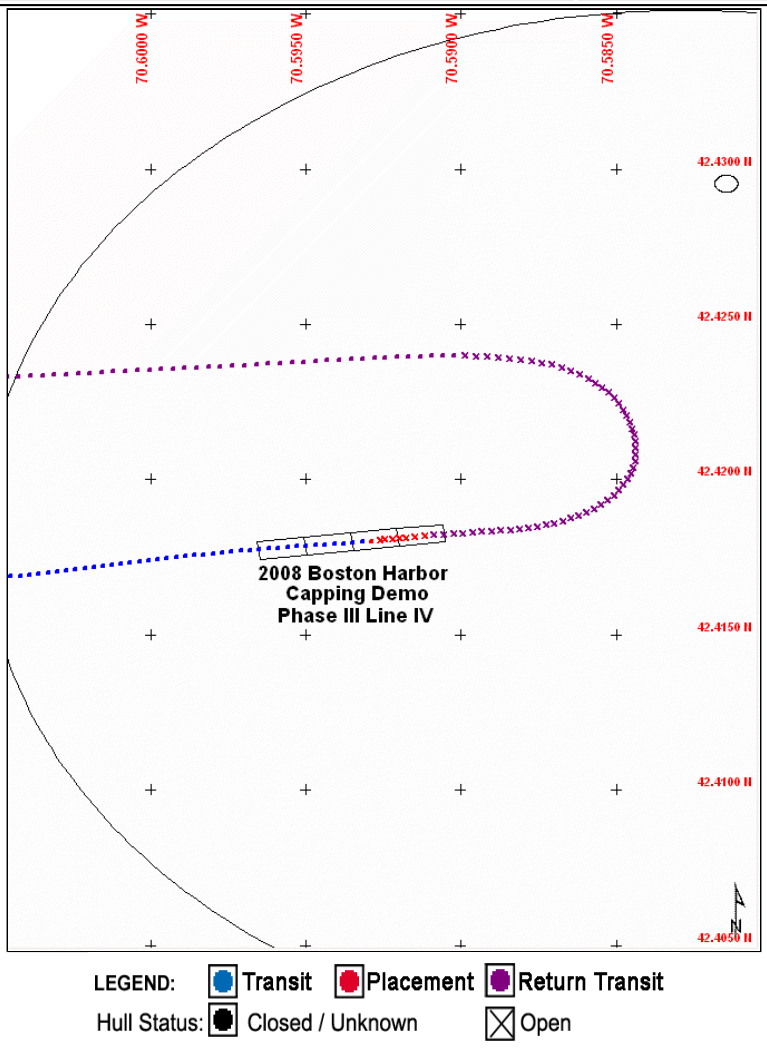
Trip #:	130
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/2/2008 09:57:30
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/2/2008 13:22:00	**Time:**	8/2/2008 13:22:35
Lat:	42.418000	**Lat:**	42.418168
Long:	-70.592899	**Long:**	-70.591153
Aft Draft:	18.70 ft	**Aft Draft:**	5.78 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

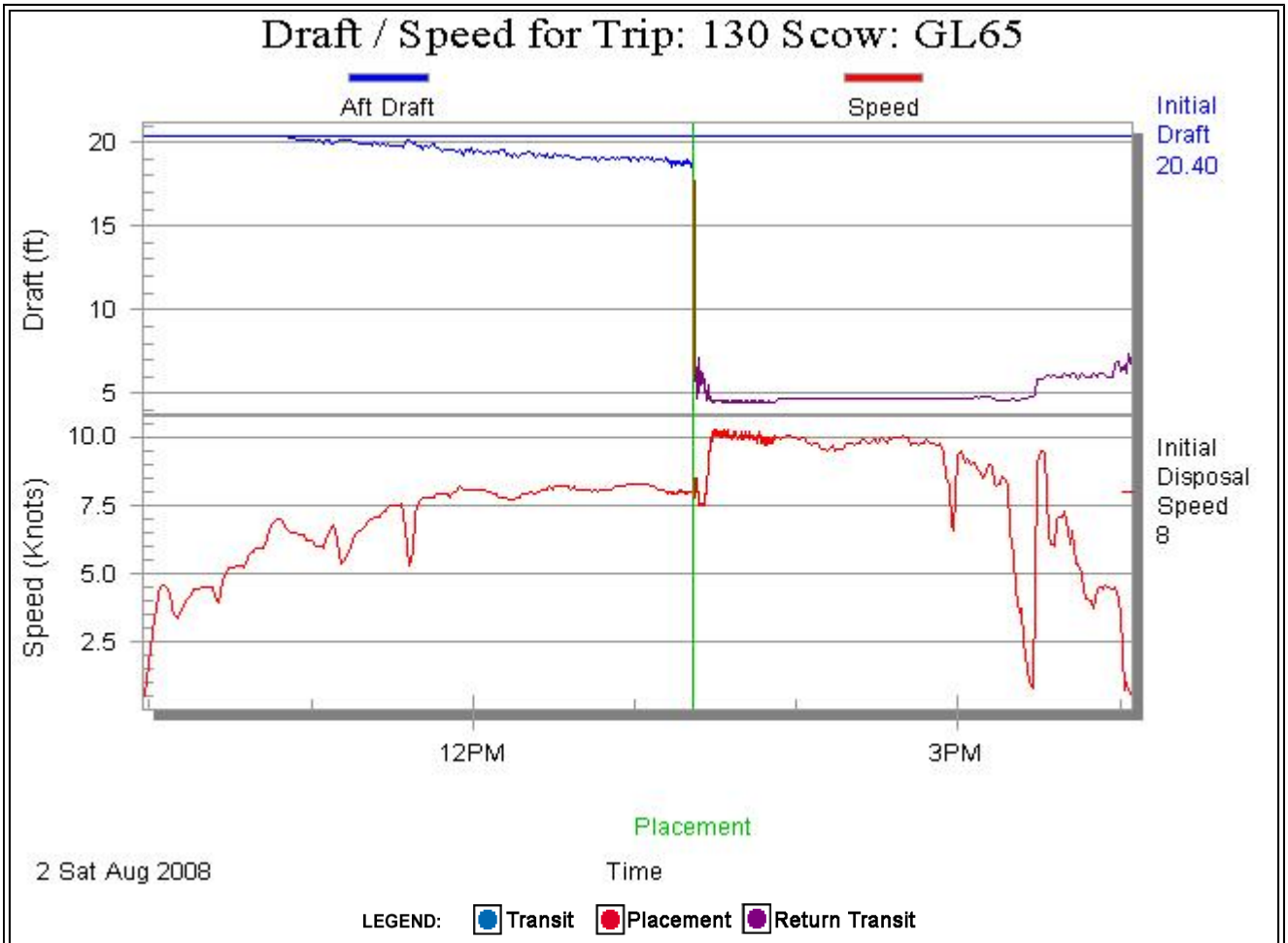


Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/2/2008 9:46:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. During the outbound transit for load

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	130
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/2/2008 09:57:30
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/2/2008 13:22:00	**Time:**	8/2/2008 13:22:35
Latitude:	42.418000	**Latitude:**	42.418168
Longitude:	-70.592899	**Longitude:**	-70.591153
Aft Draft:	18.70 ft	**Aft Draft:**	5.78 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. During the outbound transit for load #130 with the GL65, a change in draft of approximately 1.7 feet was observed. The change in draft started at 10:47 AM (Local) on 8/2/08 with a draft of 20.39 feet and ended at 1:12 PM (Local) on 8/2/08 with a draft of 18.69 feet.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

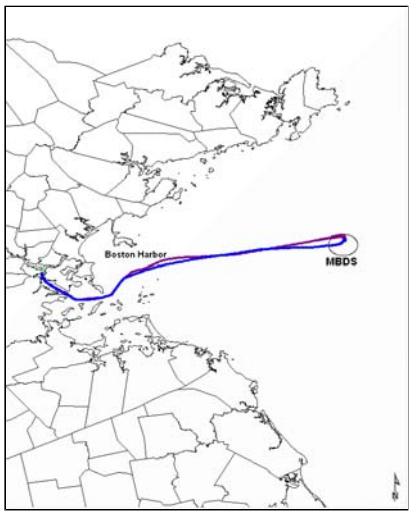
Trip Information:

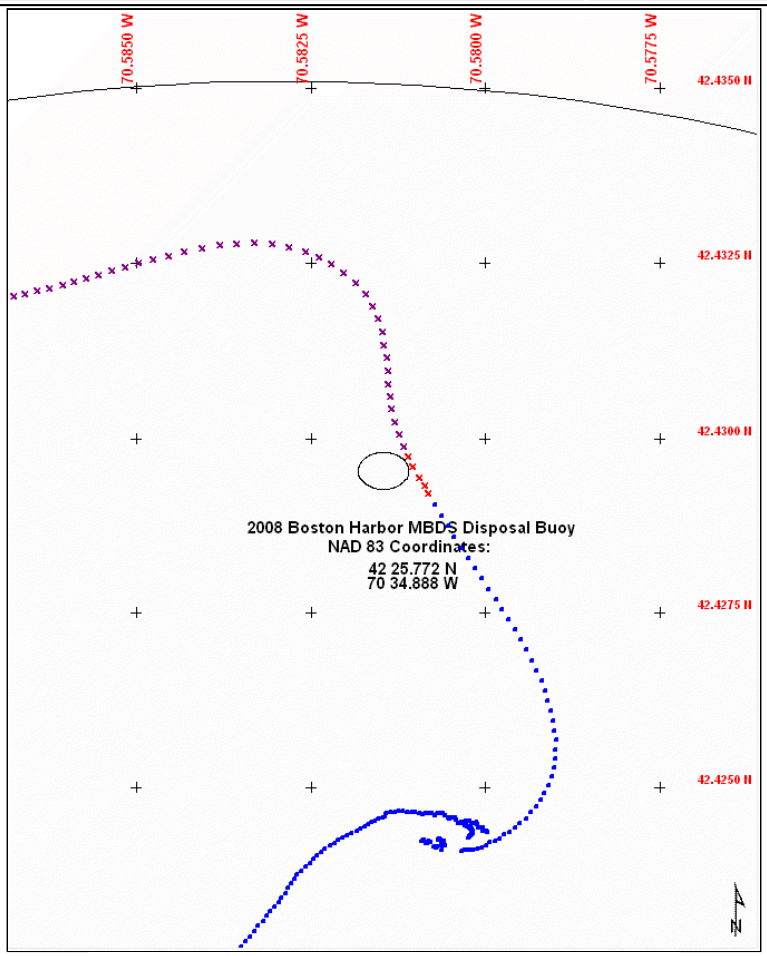
Trip #:	131
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/2/2008 19:03:34
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/2/2008 22:38:20	**Time:**	8/2/2008 22:38:40
Lat:	42.429196	**Lat:**	42.429737
Long:	-70.580818	**Long:**	-70.581100
Aft Draft:	18.53 ft	**Aft Draft:**	11.07 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

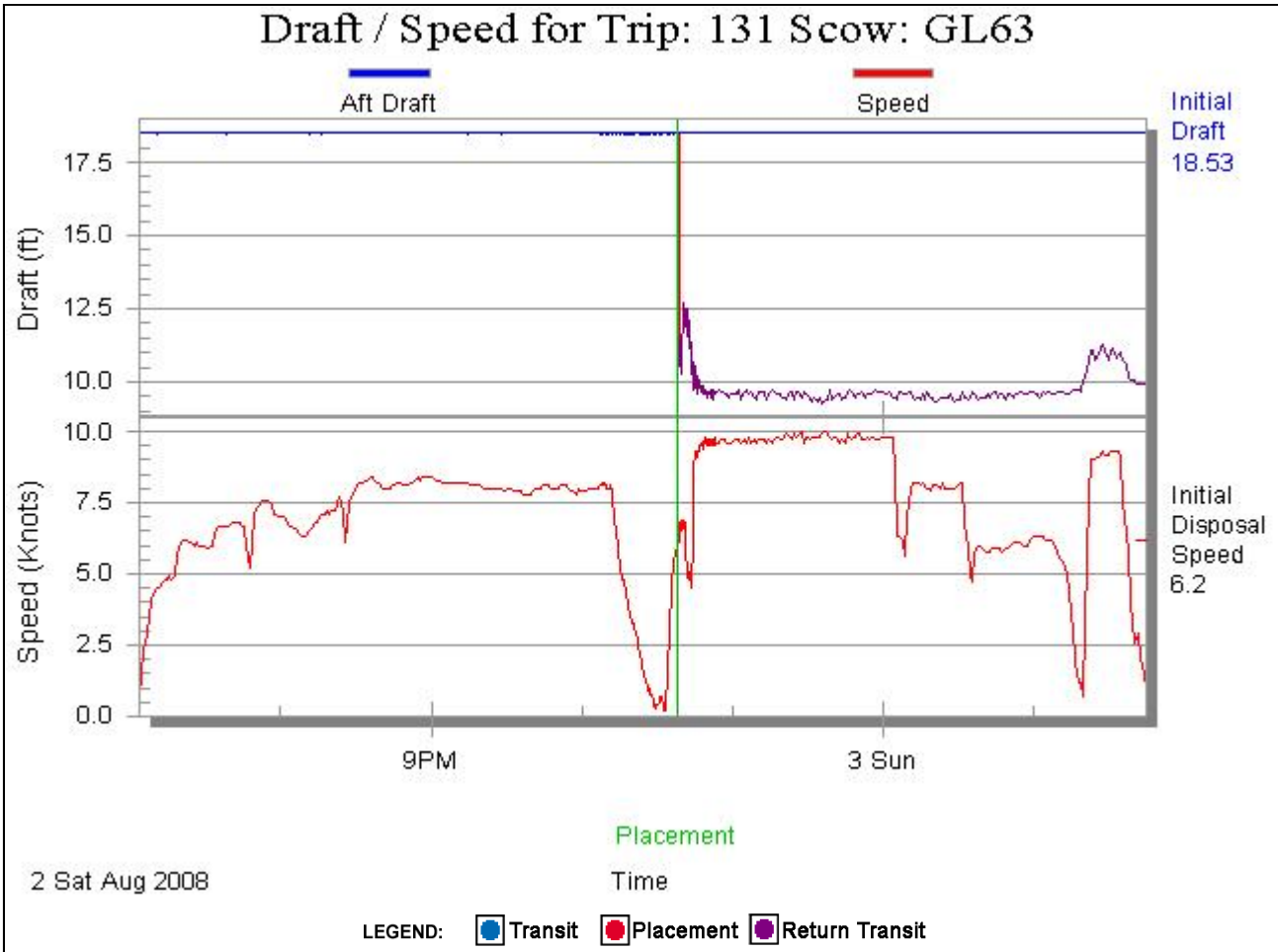
Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/2/2008 6:57:00 PM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	131
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/2/2008 19:03:34
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/2/2008 22:38:20
Latitude:	42.429196
Longitude:	-70.580818
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/2/2008 22:38:40
Latitude:	42.429737
Longitude:	-70.581100
Aft Draft:	11.07 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080408_121555

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	132
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 02:14:16
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

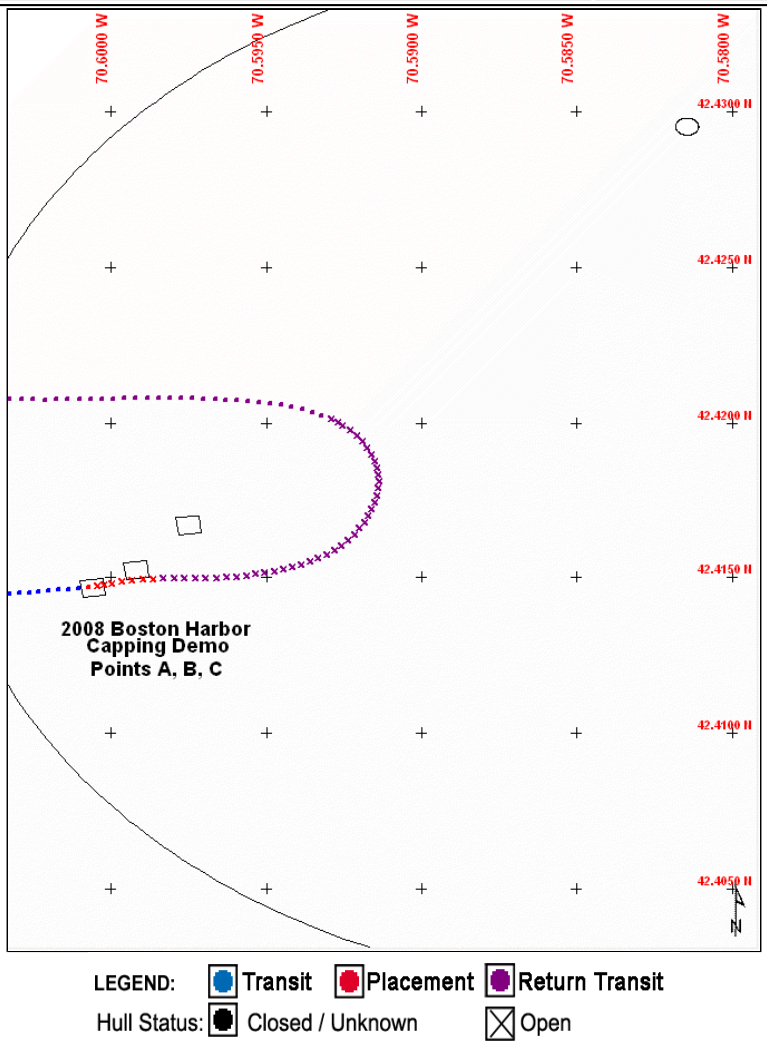
Placement Start:		**Placement End:**	
Time:	8/3/2008 05:12:12	**Time:**	8/3/2008 05:12:51
Lat:	42.414700	**Lat:**	42.414947
Long:	-70.600742	**Long:**	-70.598649
Aft Draft:	19.44 ft	**Aft Draft:**	5.12 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/3/2008 1:53:00 AM (Local)

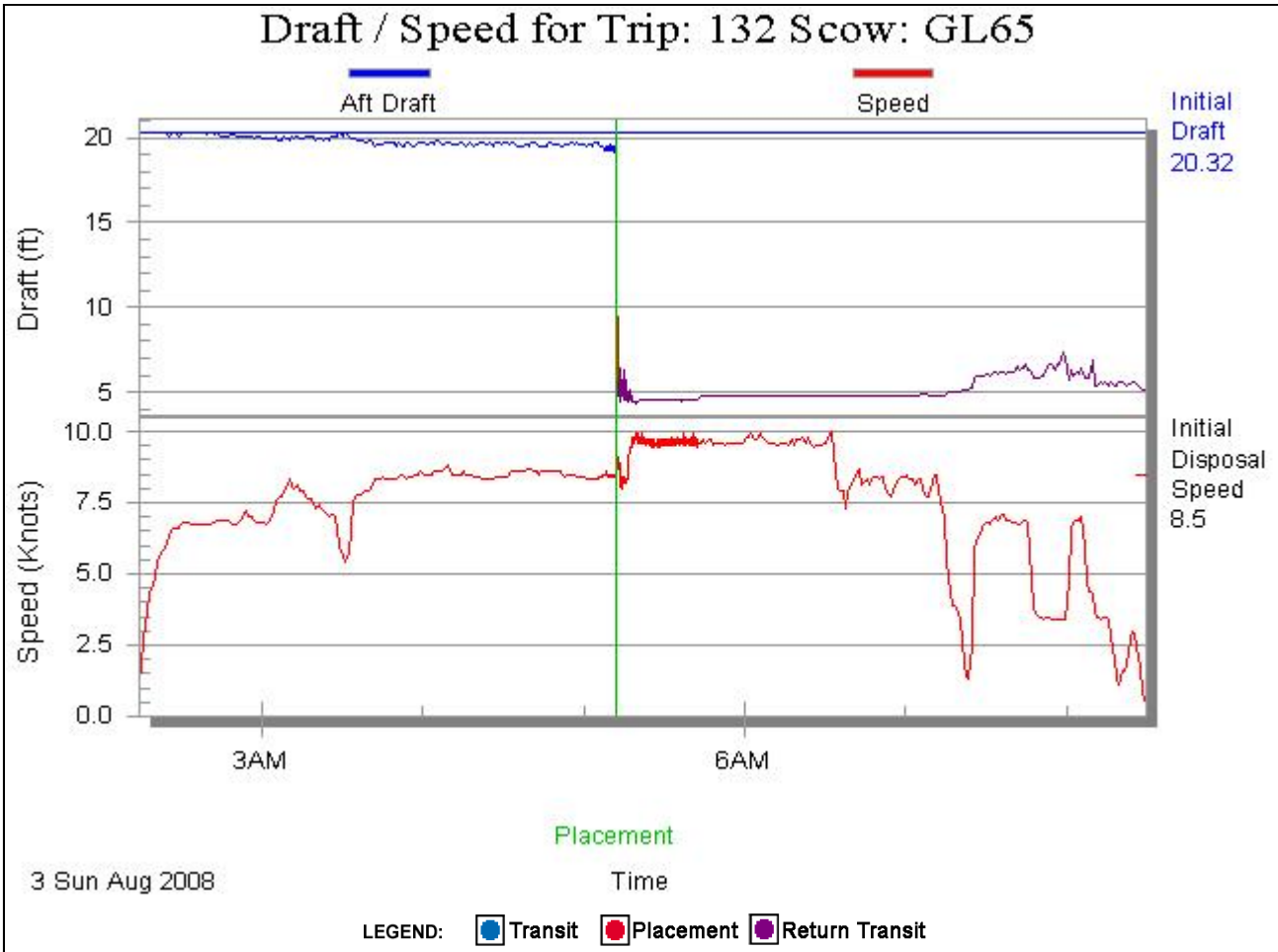
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	132
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 02:14:16
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/3/2008 05:12:12
Latitude:	42.414700
Longitude:	-70.600742
Aft Draft:	19.44 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/3/2008 05:12:51
Latitude:	42.414947
Longitude:	-70.598649
Aft Draft:	5.12 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080408_120357

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

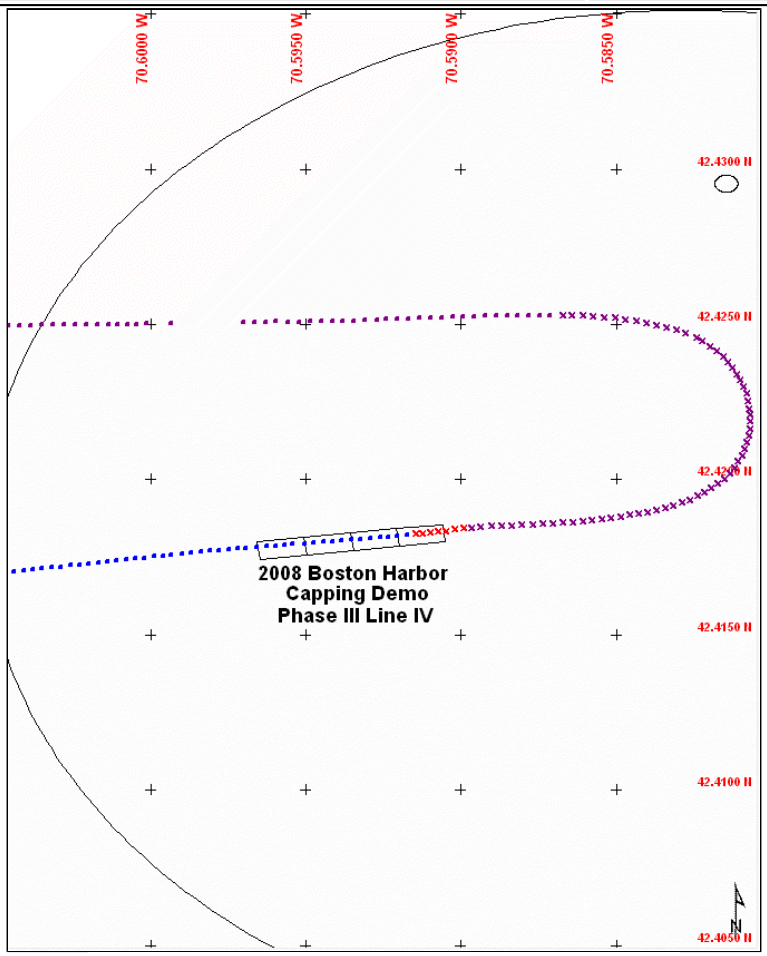
Trip #:	133
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 08:48:34
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	8/3/2008 12:12:44	8/3/2008 12:13:14
Lat:	42.418231	42.418411
Long:	-70.591416	-70.589901
Aft Draft:	18.53 ft	10.83 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/3/2008 8:32:00 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013

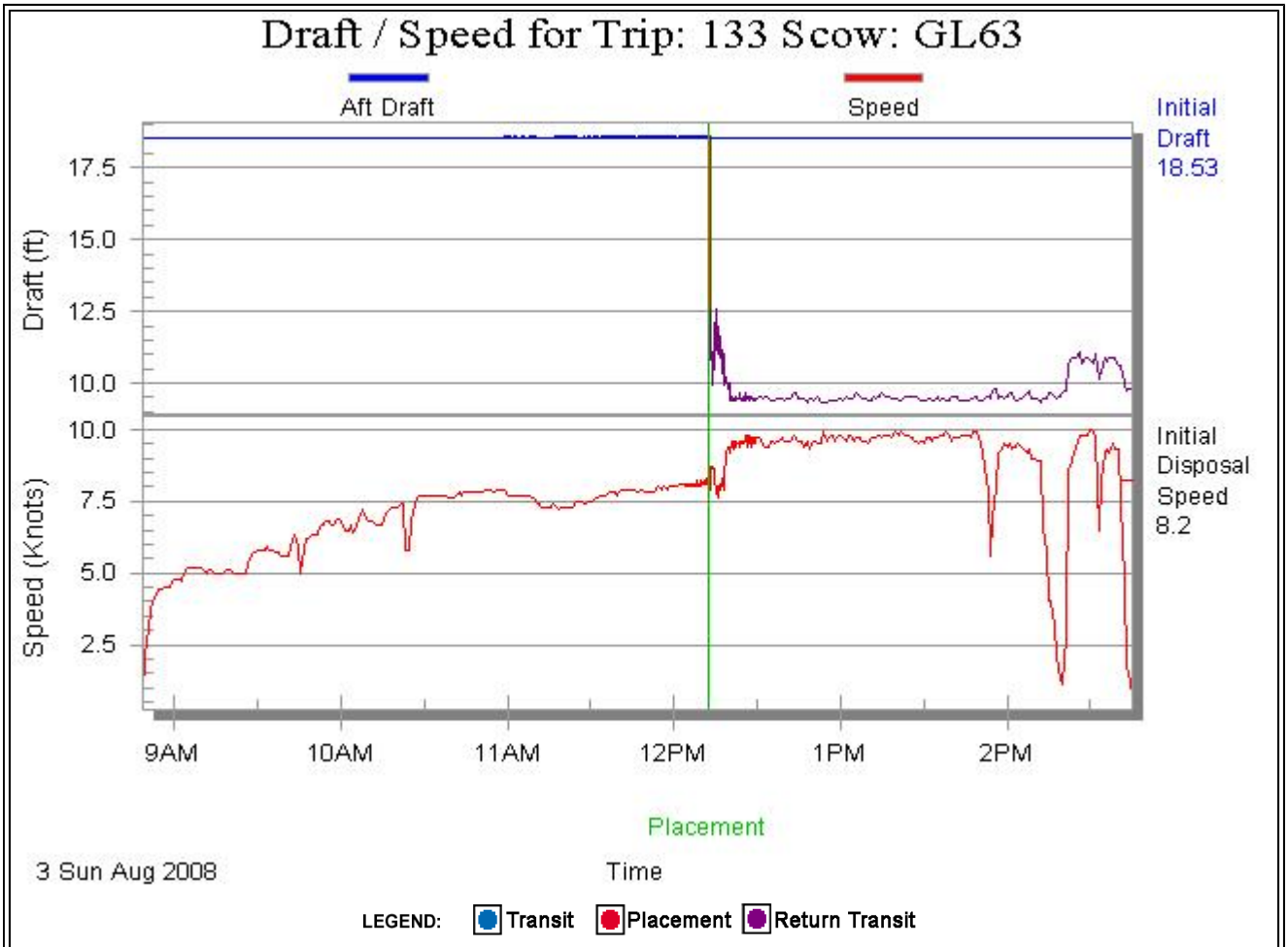




LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	133
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 08:48:34
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/3/2008 12:12:44
Latitude:	42.418231
Longitude:	-70.591416
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/3/2008 12:13:14
Latitude:	42.418411
Longitude:	-70.589901
Aft Draft:	10.83 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080408_121640

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	134
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 16:18:30
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

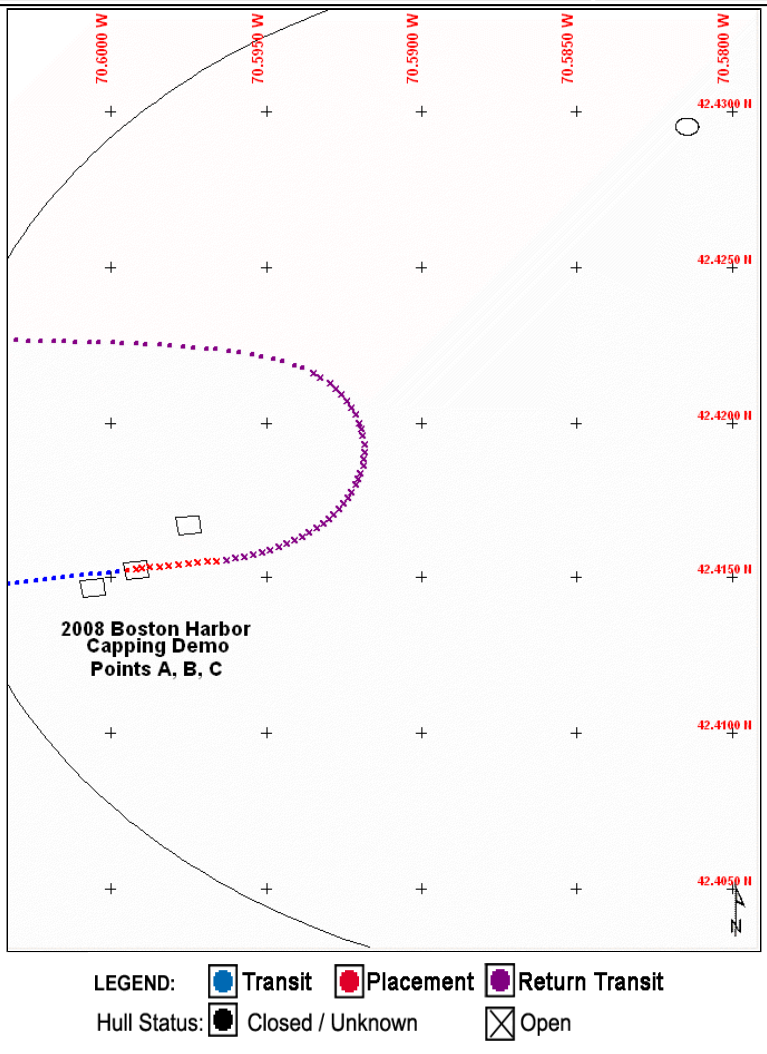
Placement Start:		**Placement End:**	
Time:	8/3/2008 19:11:54	**Time:**	8/3/2008 19:12:51
Lat:	42.415239	**Lat:**	42.415533
Long:	-70.599488	**Long:**	-70.596601
Aft Draft:	18.40 ft	**Aft Draft:**	4.97 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/3/2008 3:58:00 PM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



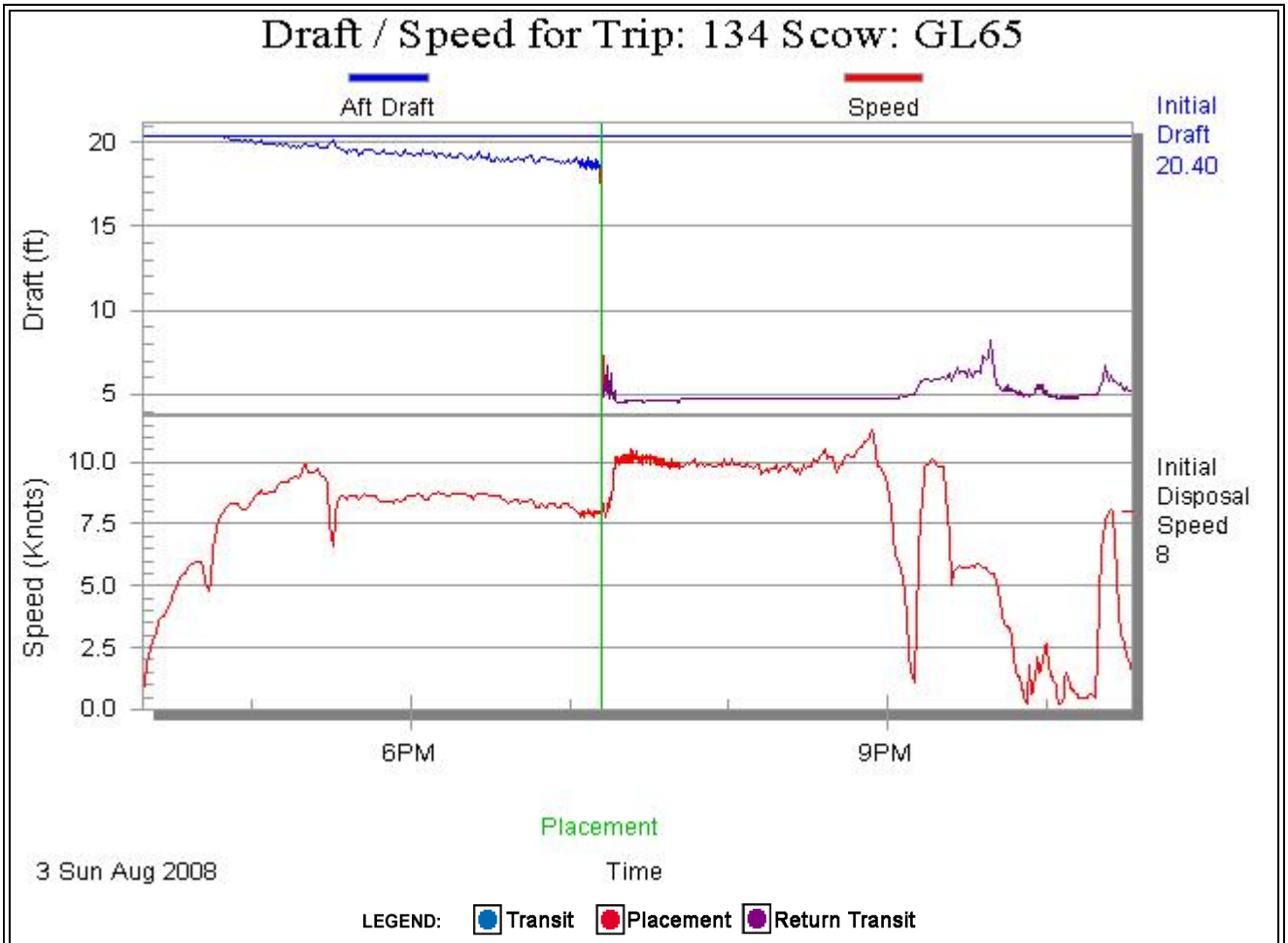


Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. During the outbound transit for load

#134 with the GL65, a change in draft of approximately 1.9 feet was observed. The change in draft started at 4:48 PM (Local) on 8/3/08 with a draft of 20.39 feet and ended at 7:11 PM (Local) on 8/3/08 with a draft of 18.4 feet.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	134
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 16:18:30
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/3/2008 19:11:54	**Time:**	8/3/2008 19:12:51
Latitude:	42.415239	**Latitude:**	42.415533
Longitude:	-70.599488	**Longitude:**	-70.596601
Aft Draft:	18.40 ft	**Aft Draft:**	4.97 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. During the outbound transit for load #134 with the GL65, a change in draft of approximately 1.9 feet was observed. The change in draft started at 4:48 PM (Local) on 8/3/08 with a draft of 20.39 feet and ended at 7:11 PM (Local) on 8/3/08 with a draft of 18.4 feet.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	135
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 22:52:58
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

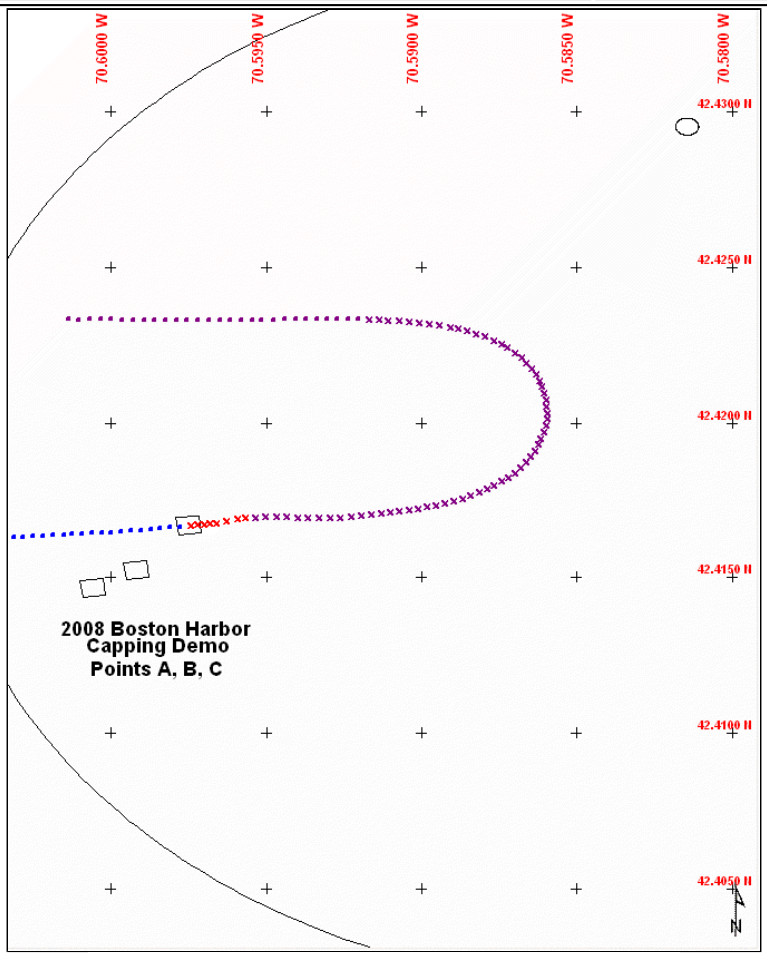
Placement Start:		**Placement End:**	
Time:	8/4/2008 02:03:50	**Time:**	8/4/2008 02:04:24
Lat:	42.416669	**Lat:**	42.416892
Long:	-70.597431	**Long:**	-70.595681
Aft Draft:	18.53 ft	**Aft Draft:**	11.07 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/3/2008 10:39:00 PM (Local)

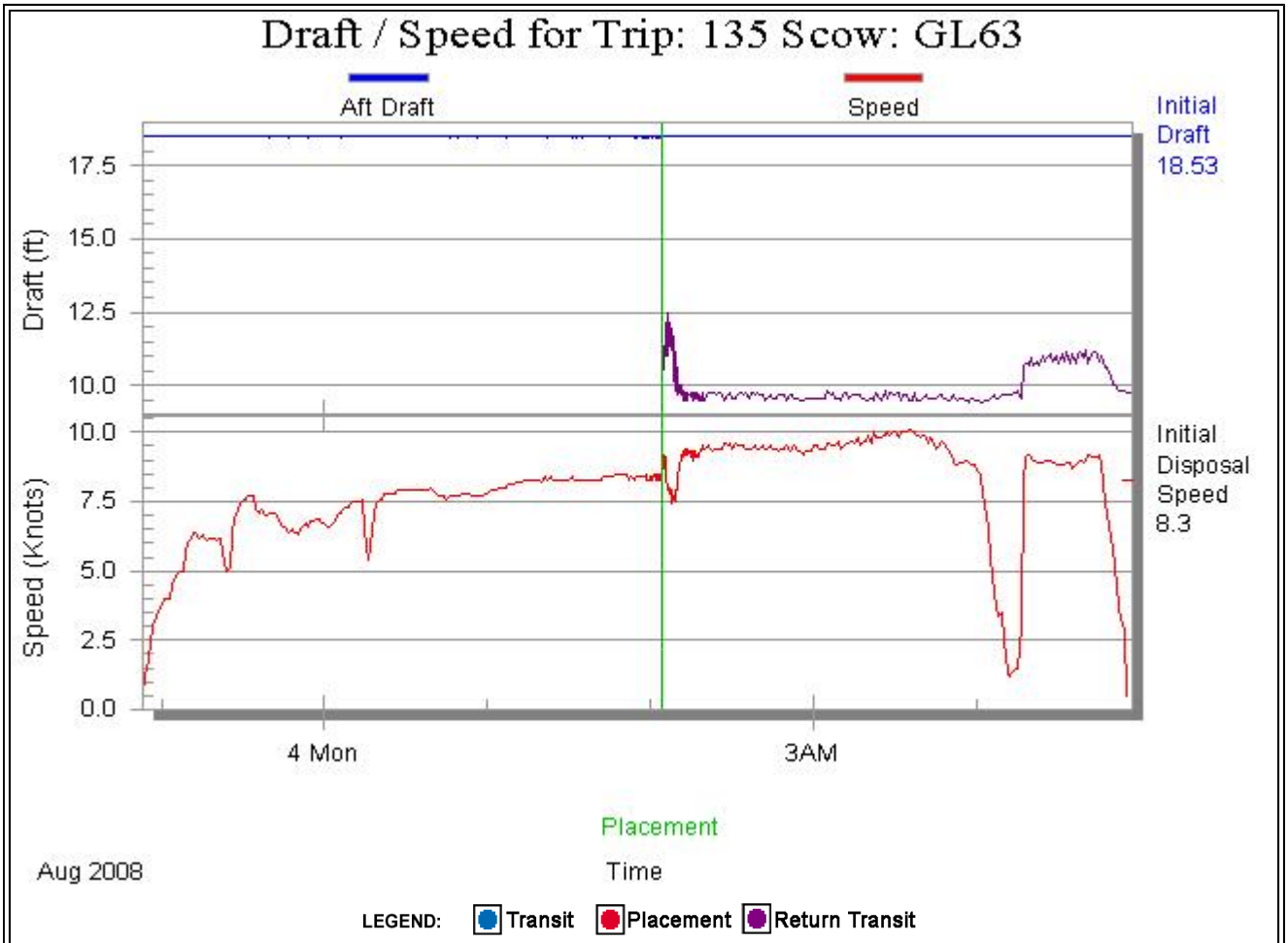
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	135
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/3/2008 22:52:58
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/4/2008 02:03:50
Latitude:	42.416669
Longitude:	-70.597431
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/4/2008 02:04:24
Latitude:	42.416892
Longitude:	-70.595681
Aft Draft:	11.07 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080408_120330

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

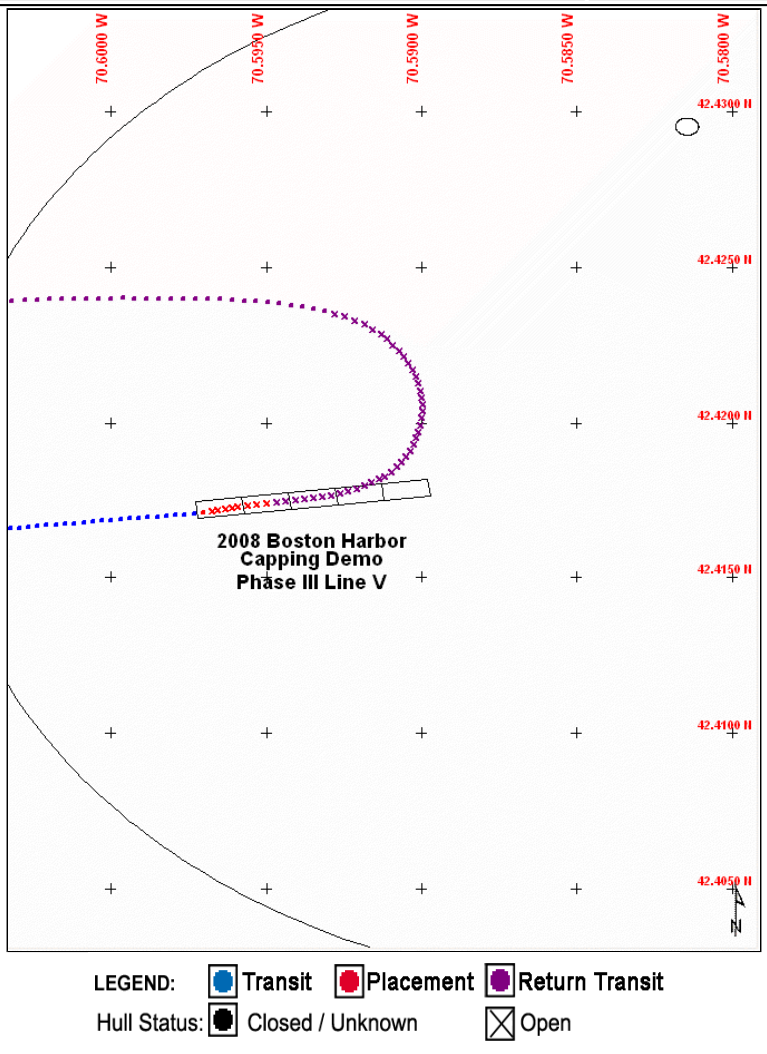
Trip #:	136
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/4/2008 05:05:30
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/4/2008 08:17:29	**Time:**	8/4/2008 08:18:10
Lat:	42.417099	**Lat:**	42.417385
Long:	-70.597046	**Long:**	-70.594994
Aft Draft:	19.58 ft	**Aft Draft:**	4.60 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

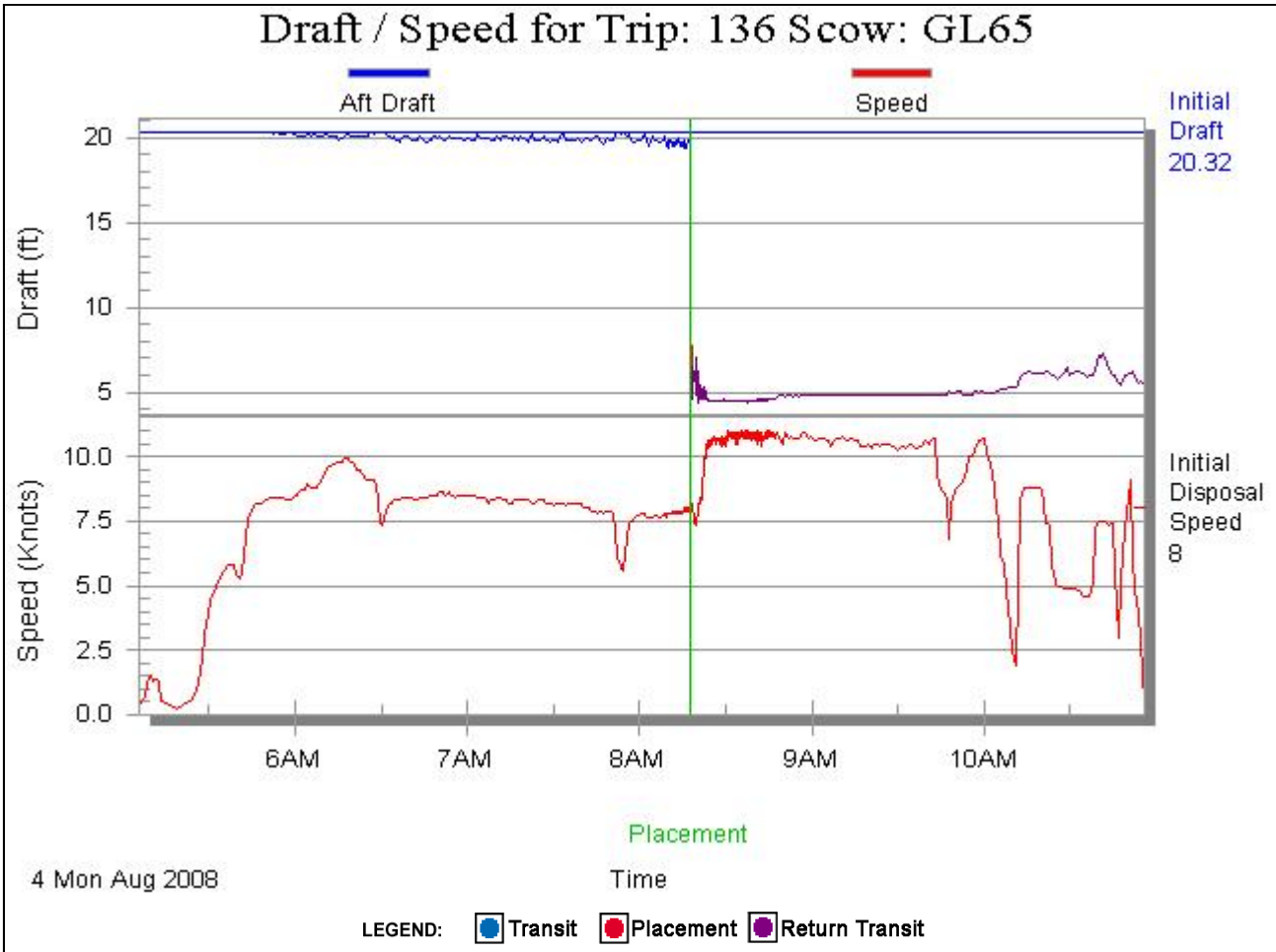
Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/4/2008 4:52:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	136
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/4/2008 05:05:30
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/4/2008 08:17:29
Latitude:	42.417099
Longitude:	-70.597046
Aft Draft:	19.58 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/4/2008 08:18:10
Latitude:	42.417385
Longitude:	-70.594994
Aft Draft:	4.60 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080508_094519

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

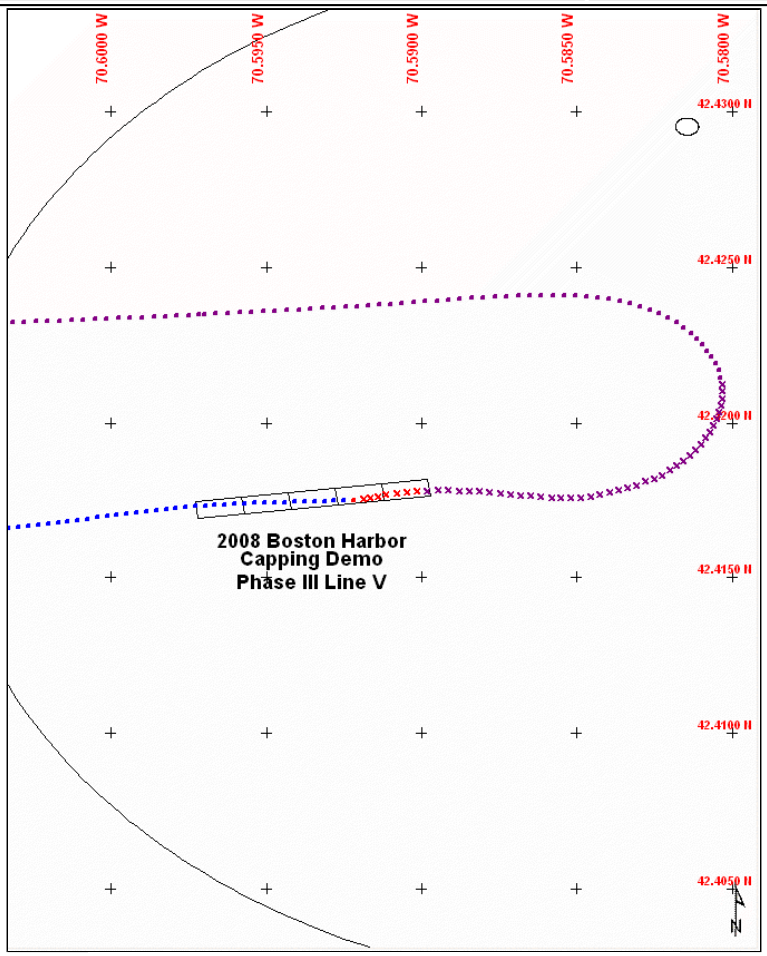
Trip #:	138
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/4/2008 20:22:03
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	8/4/2008 23:31:41	8/4/2008 23:32:20
Lat:	42.417495	42.417763
Long:	-70.592213	-70.590128
Aft Draft:	18.48 ft	5.85 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

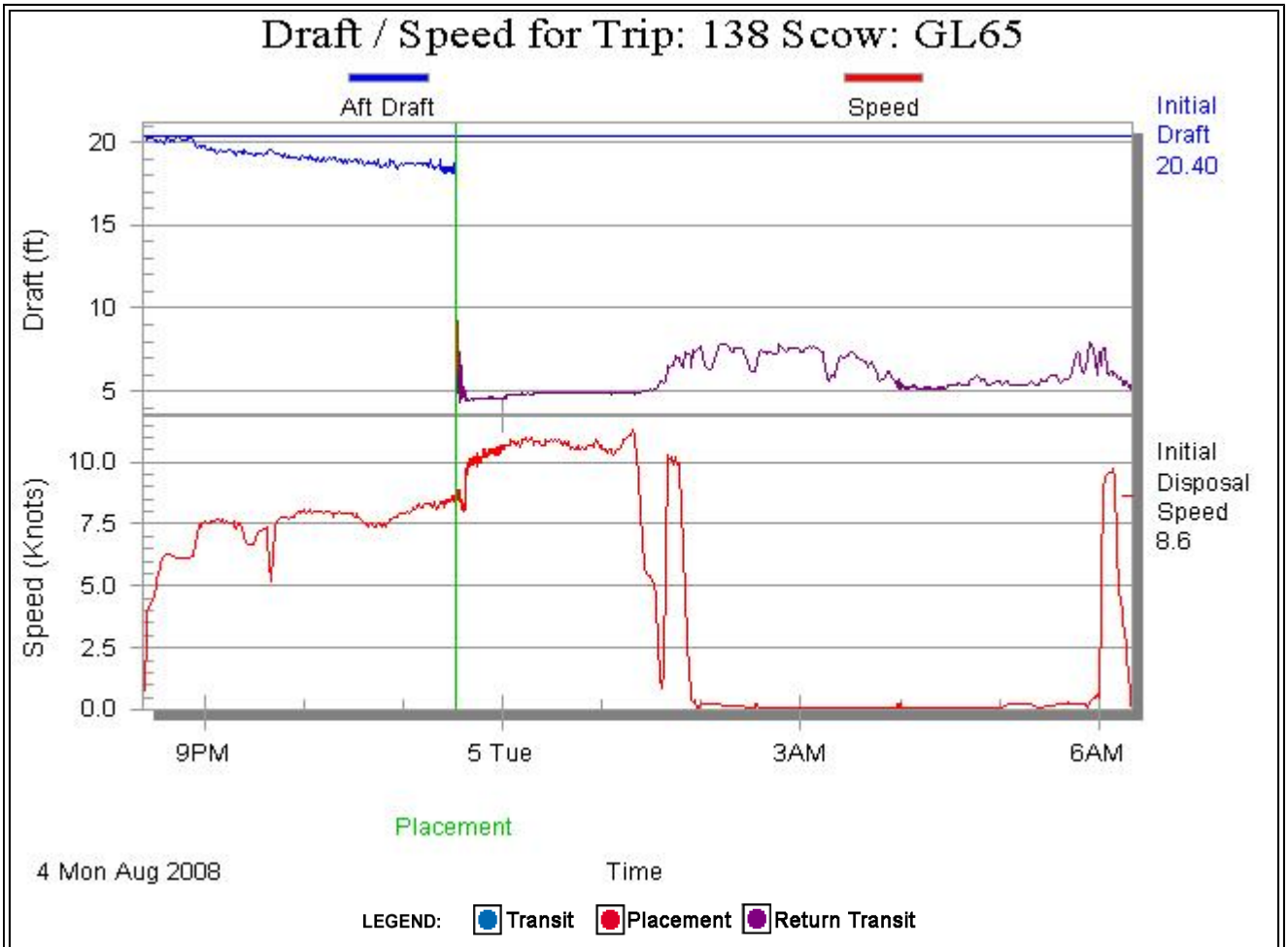
Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/4/2008 8:03:00 PM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	138
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/4/2008 20:22:03
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/4/2008 23:31:41
Latitude:	42.417495
Longitude:	-70.592213
Aft Draft:	18.48 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/4/2008 23:32:20
Latitude:	42.417763
Longitude:	-70.590128
Aft Draft:	5.85 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080508_094940

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

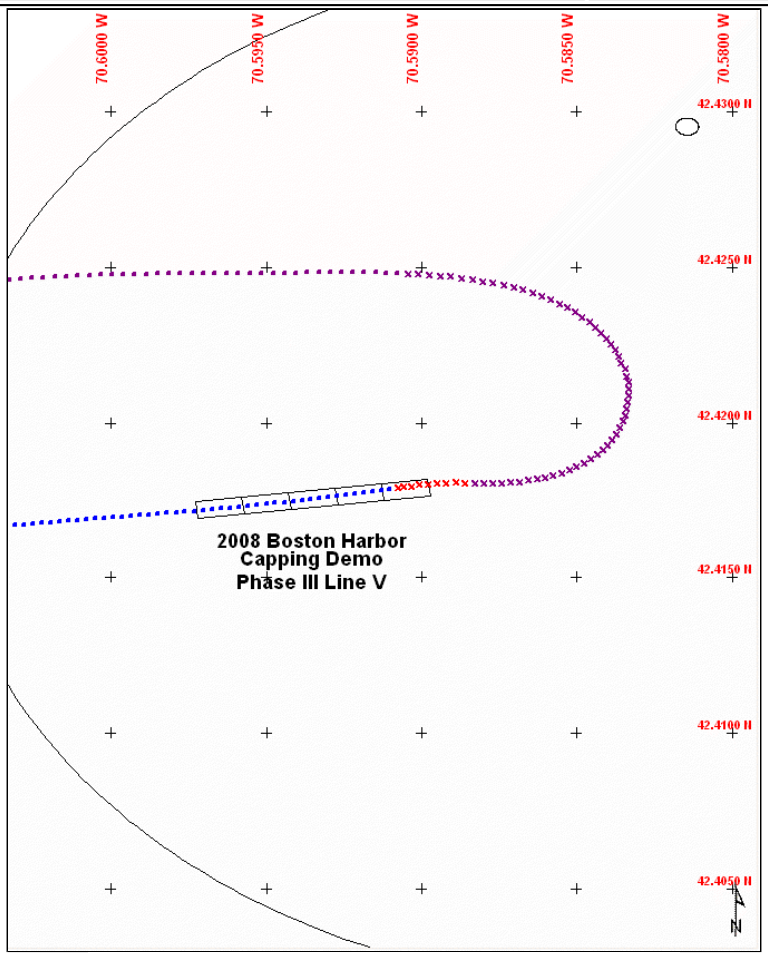
Trip #:	139
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	8/5/2008 07:58:33
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/5/2008 11:28:13	**Time:**	8/5/2008 11:28:58
Lat:	42.417882	**Lat:**	42.418038
Long:	-70.590747	**Long:**	-70.588588
Aft Draft:	18.53 ft	**Aft Draft:**	10.67 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/5/2008 7:58:33 AM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080608_102947

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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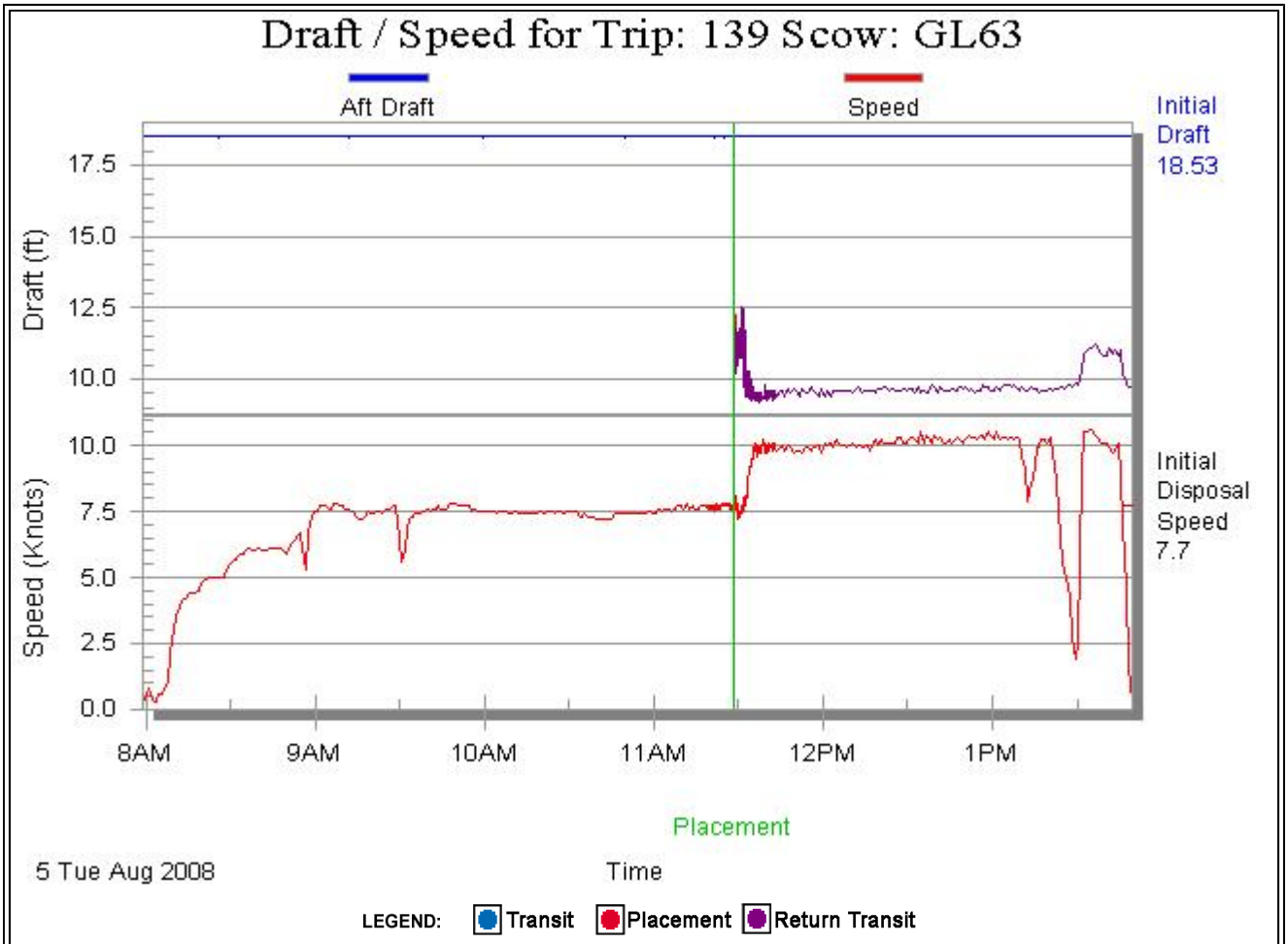


Trip Information

Trip #:	139
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	8/5/2008 07:58:33
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/5/2008 11:28:13
Latitude:	42.417882
Longitude:	-70.590747
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/5/2008 11:28:58
Latitude:	42.418038
Longitude:	-70.588588
Aft Draft:	10.67 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080608_102947

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

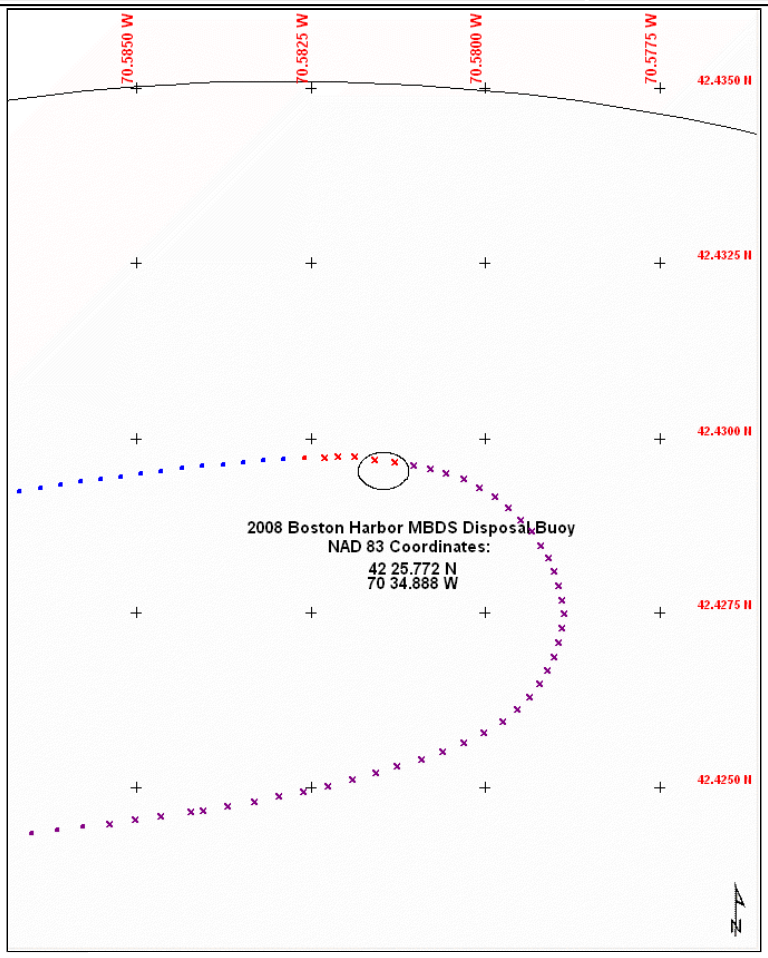
Trip #:	140
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/5/2008 17:07:51
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/5/2008 20:11:23	**Time:**	8/5/2008 20:11:50
Lat:	42.429717	**Lat:**	42.429658
Long:	-70.582600	**Long:**	-70.581298
Aft Draft:	18.99 ft	**Aft Draft:**	4.75 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/5/2008 4:59:00 PM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080608_140615

ADISS
Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
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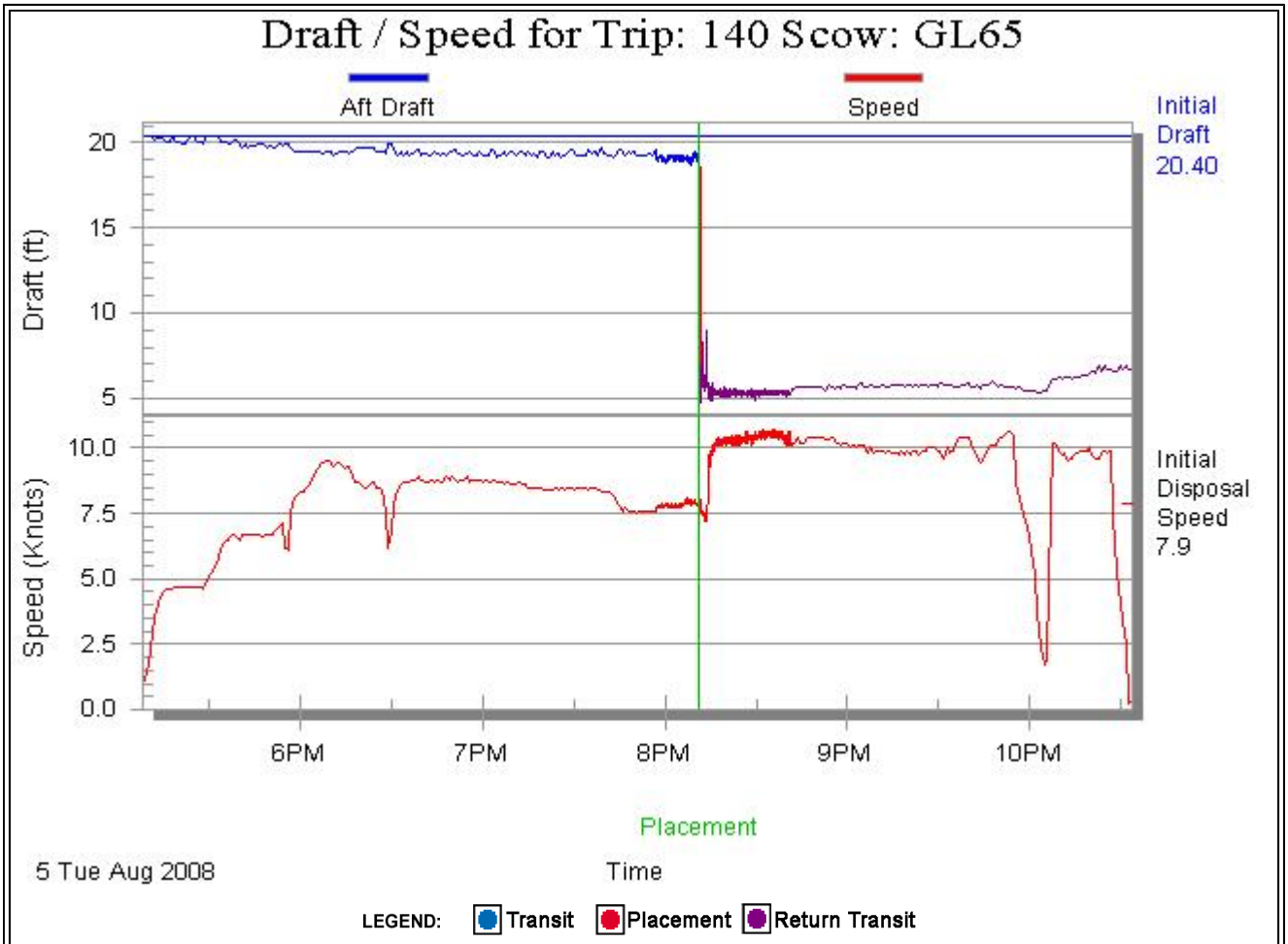


Trip Information

Trip #:	140
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/5/2008 17:07:51
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/5/2008 20:11:23
Latitude:	42.429717
Longitude:	-70.582600
Aft Draft:	18.99 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/5/2008 20:11:50
Latitude:	42.429658
Longitude:	-70.581298
Aft Draft:	4.75 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080608_140615

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

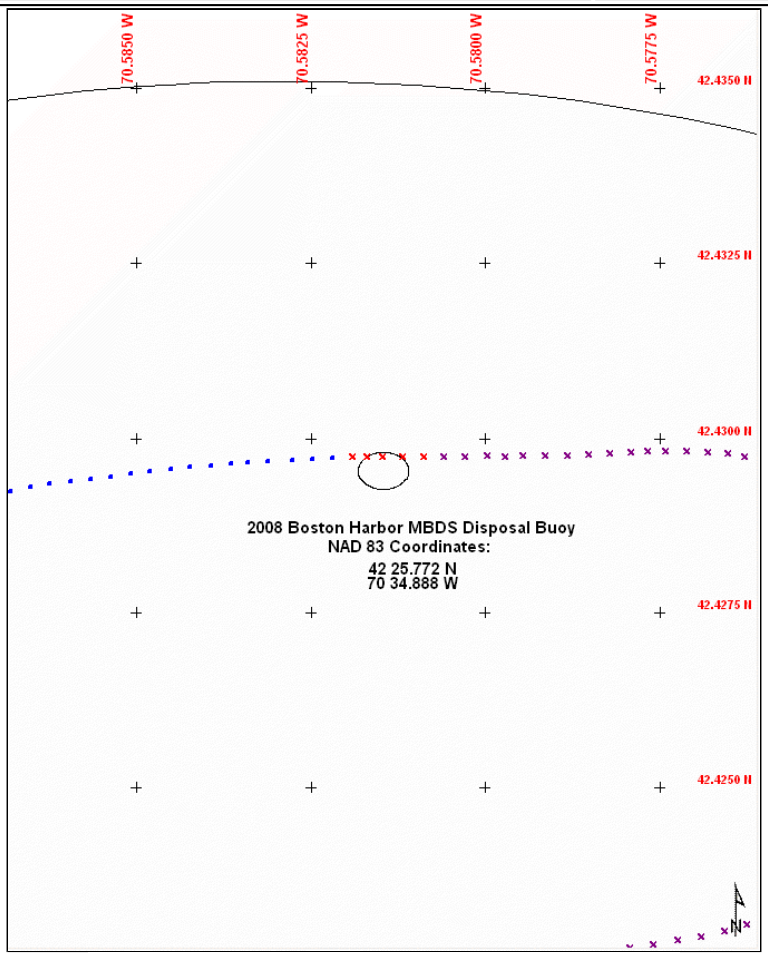
Trip #:	141
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/5/2008 23:40:57
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/6/2008 03:03:37	**Time:**	8/6/2008 03:03:58
Lat:	42.429736	**Lat:**	42.429736
Long:	-70.581907	**Long:**	-70.580883
Aft Draft:	18.53 ft	**Aft Draft:**	9.64 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/5/2008 11:21:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080608_140642

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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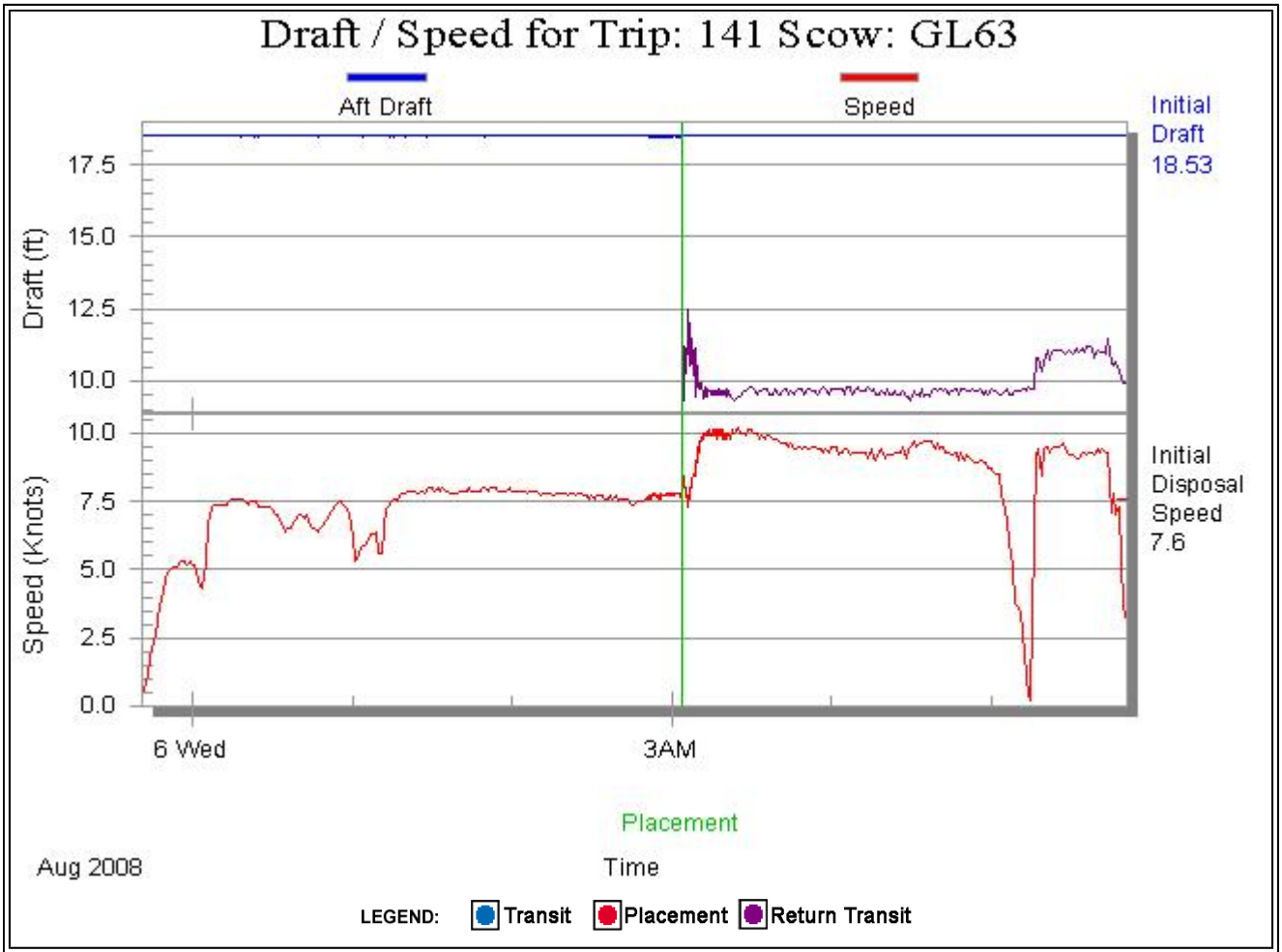


Trip Information

Trip #:	141
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/5/2008 23:40:57
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/6/2008 03:03:37
Latitude:	42.429736
Longitude:	-70.581907
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/6/2008 03:03:58
Latitude:	42.429736
Longitude:	-70.580883
Aft Draft:	9.64 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080608_140642

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

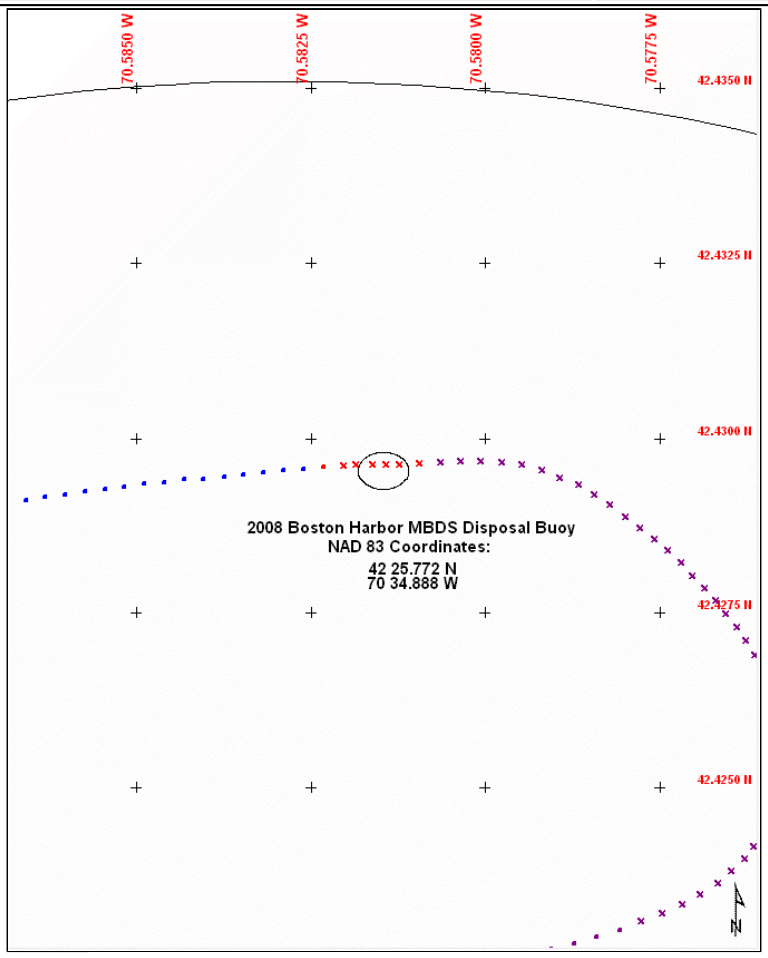
Trip #:	142
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/6/2008 06:54:41
Init Aft Draft:	19.88 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/6/2008 09:52:40	**Time:**	8/6/2008 09:53:09
Lat:	42.429587	**Lat:**	42.429650
Long:	-70.582328	**Long:**	-70.580939
Aft Draft:	18.62 ft	**Aft Draft:**	5.34 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/6/2008 5:59:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080708_112534

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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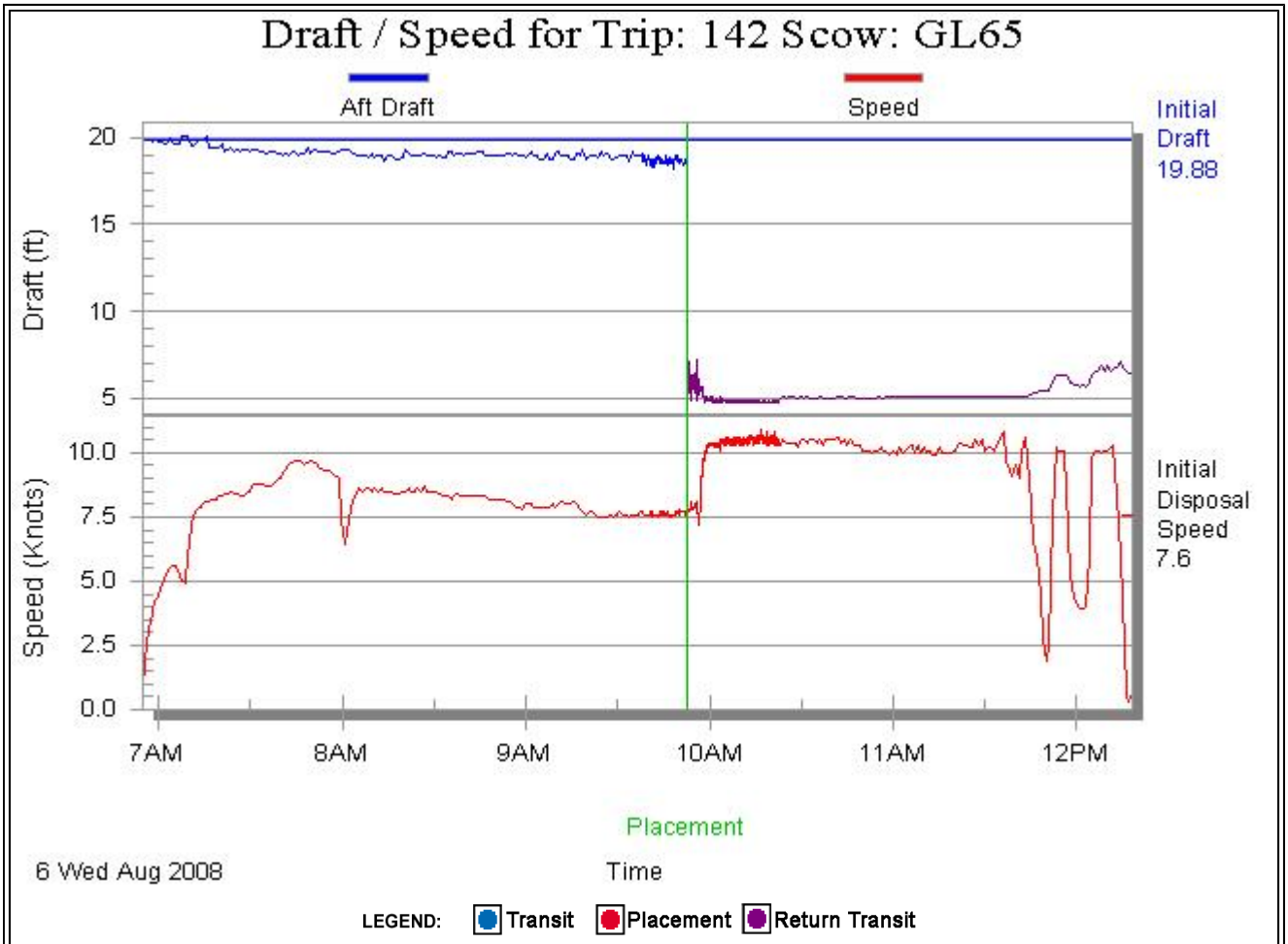


Trip Information

Trip #:	142
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/6/2008 06:54:41
Init Aft Draft:	19.88 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/6/2008 09:52:40
Latitude:	42.429587
Longitude:	-70.582328
Aft Draft:	18.62 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/6/2008 09:53:09
Latitude:	42.429650
Longitude:	-70.580939
Aft Draft:	5.34 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080708_112534

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

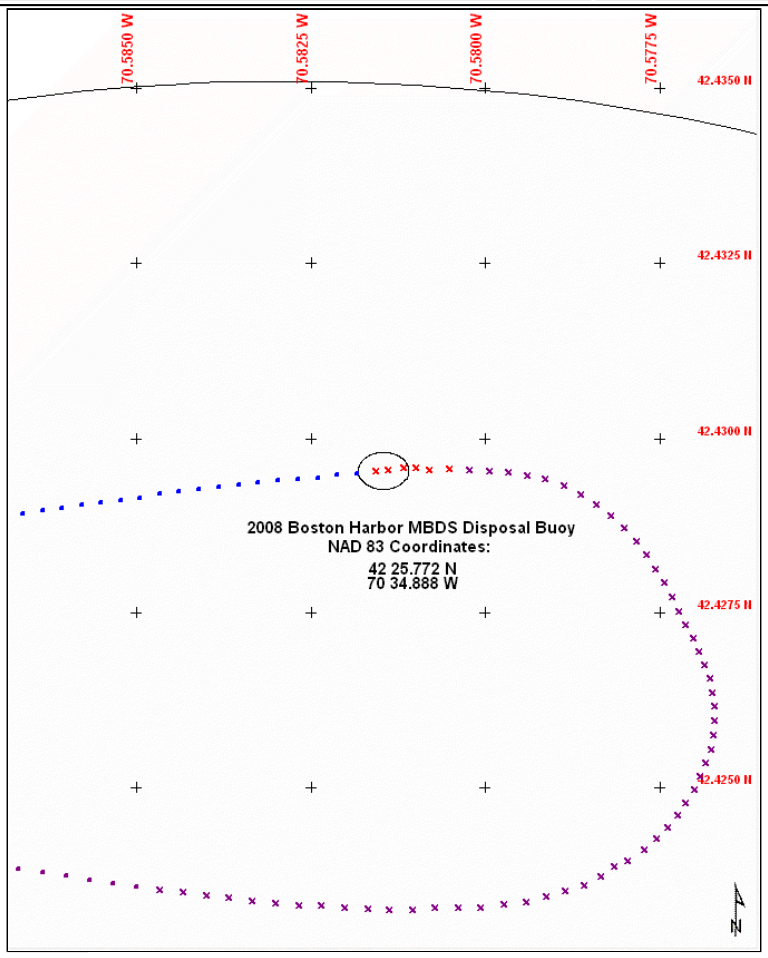
Trip #:	143
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/6/2008 14:26:05
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/6/2008 17:42:24	**Time:**	8/6/2008 17:42:47
Lat:	42.429536	**Lat:**	42.429559
Long:	-70.581580	**Long:**	-70.580507
Aft Draft:	18.53 ft	**Aft Draft:**	10.36 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/6/2008 1:52:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080708_113028

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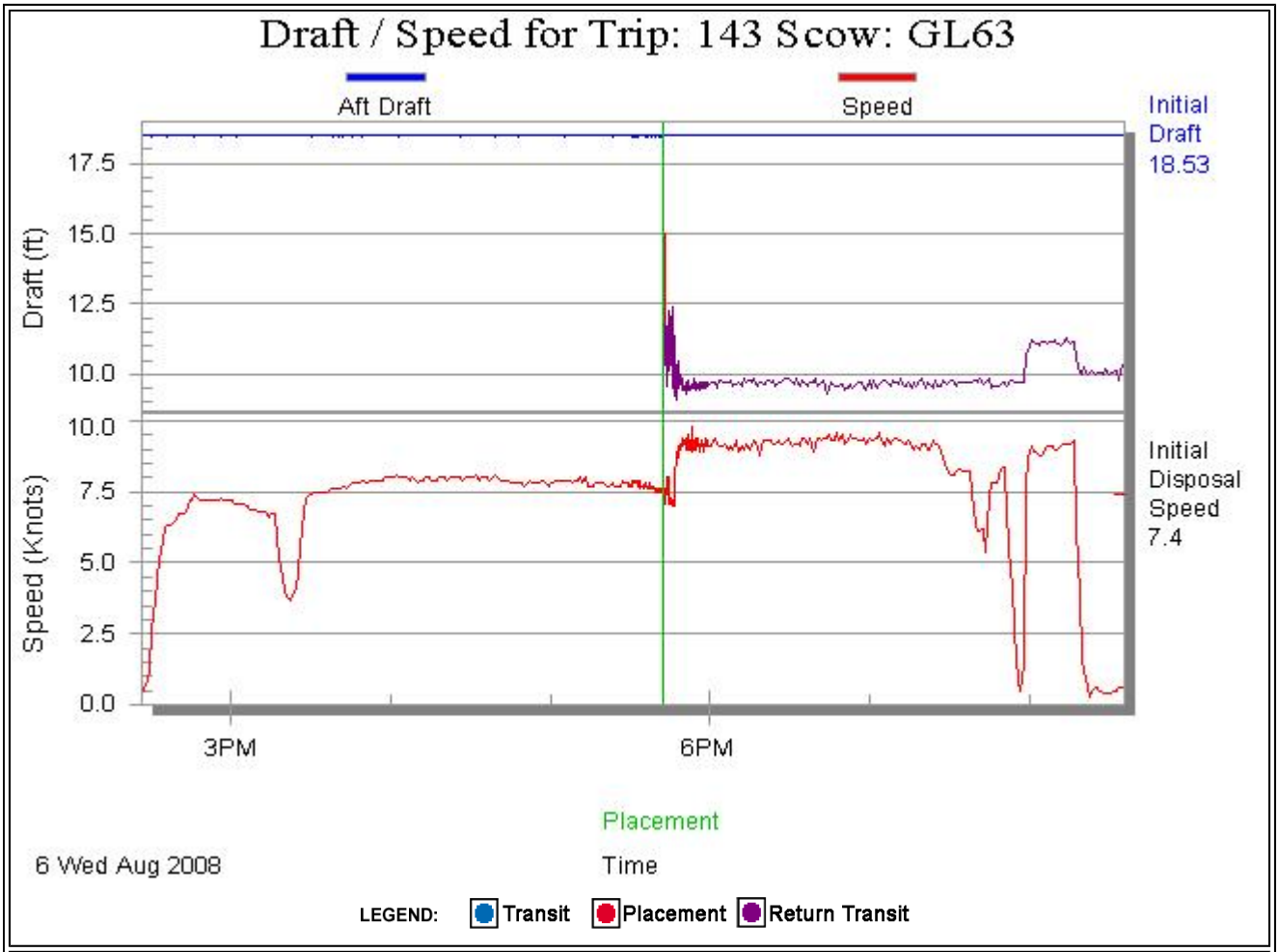


Trip Information

Trip #:	143
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/6/2008 14:26:05
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/6/2008 17:42:24
Latitude:	42.429536
Longitude:	-70.581580
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/6/2008 17:42:47
Latitude:	42.429559
Longitude:	-70.580507
Aft Draft:	10.36 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080708_113028

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

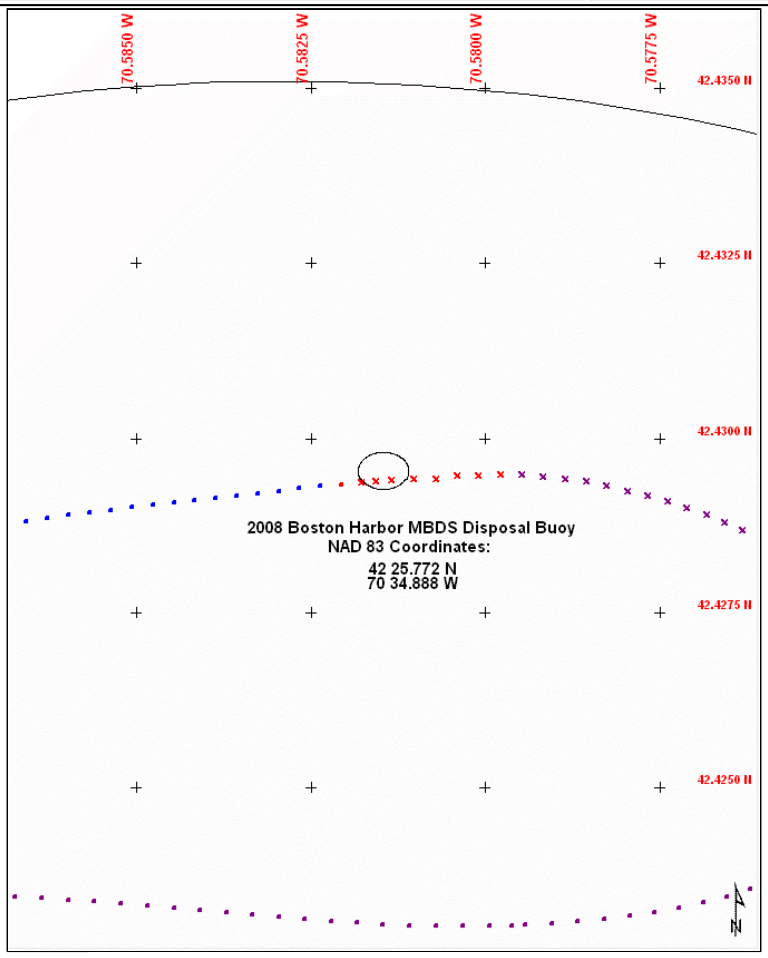
Trip #:	144
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/7/2008 04:54:36
Init Aft Draft:	19.51 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/7/2008 07:57:28	**Time:**	8/7/2008 07:58:13
Lat:	42.429327	**Lat:**	42.429486
Long:	-70.582073	**Long:**	-70.579788
Aft Draft:	18.33 ft	**Aft Draft:**	5.71 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/7/2008 4:22:00 AM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080808_111528

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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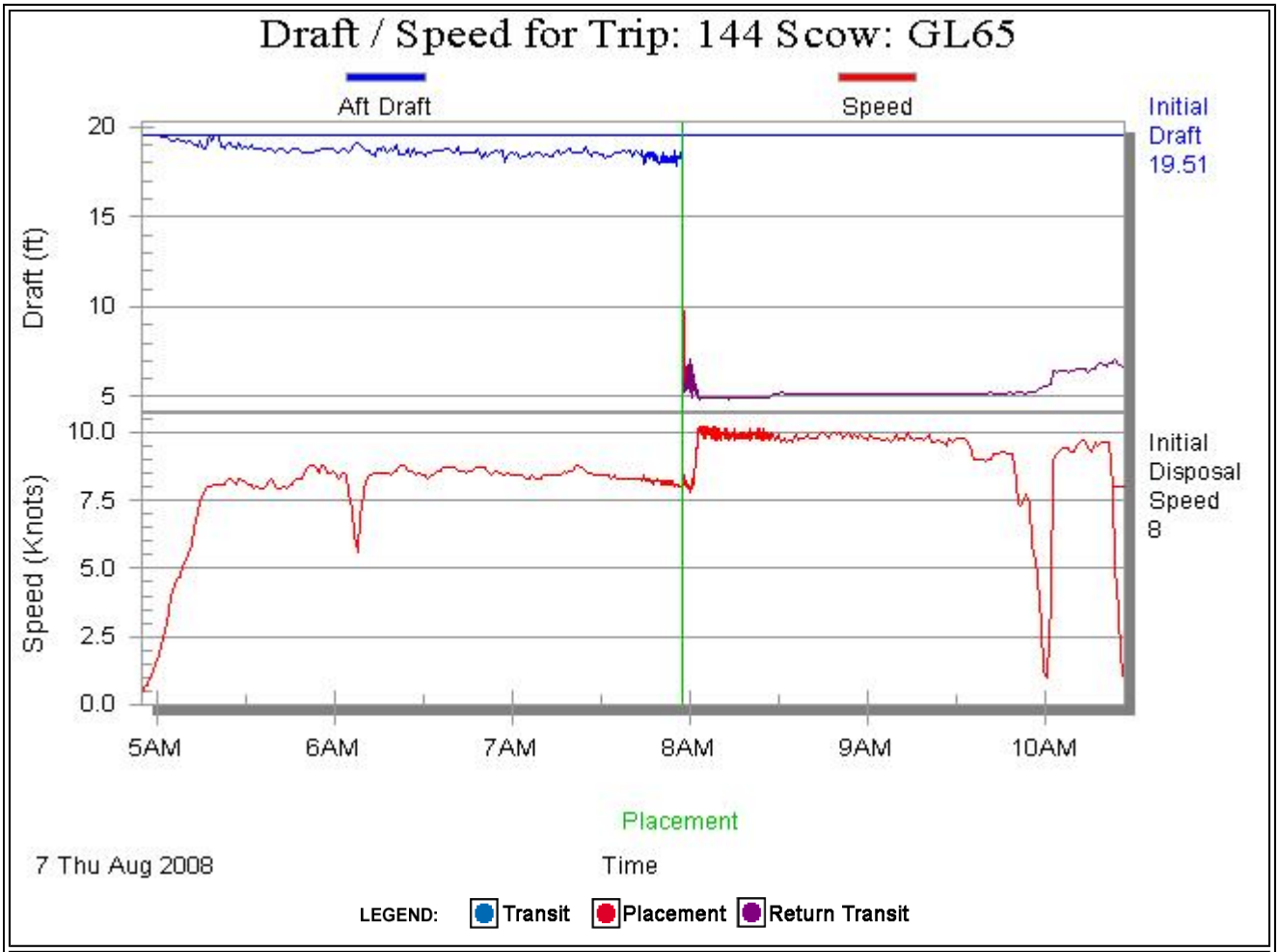


Trip Information

Trip #:	144
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/7/2008 04:54:36
Init Aft Draft:	19.51 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/7/2008 07:57:28
Latitude:	42.429327
Longitude:	-70.582073
Aft Draft:	18.33 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/7/2008 07:58:13
Latitude:	42.429486
Longitude:	-70.579788
Aft Draft:	5.71 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080808_111528

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

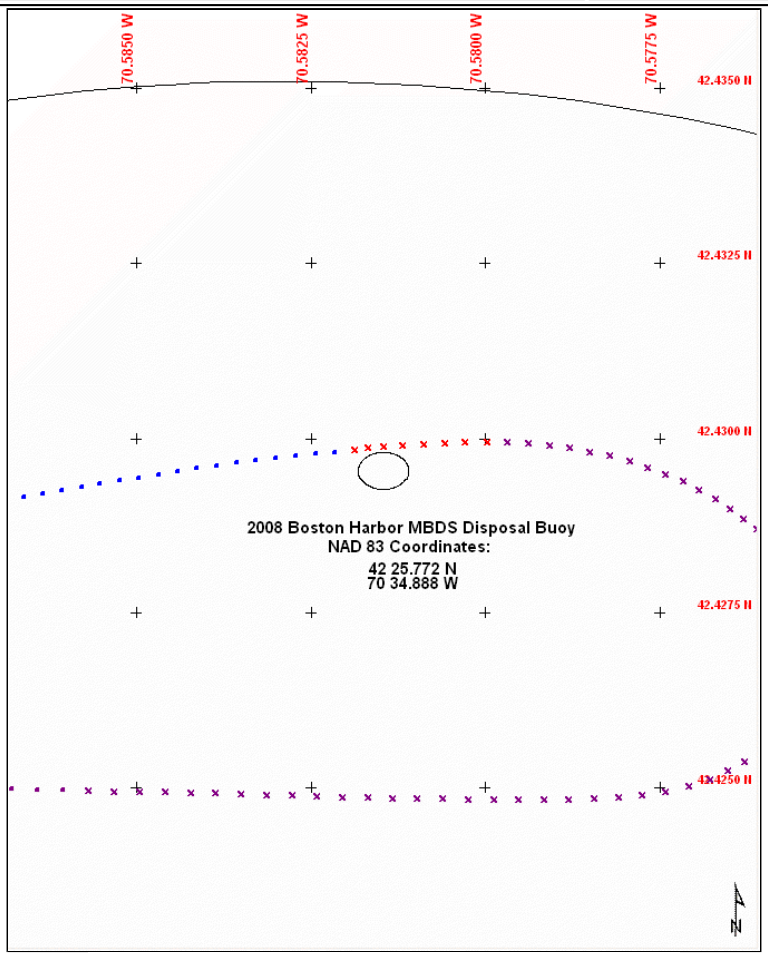
Trip #:	145
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/7/2008 12:33:48
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/7/2008 16:00:24	**Time:**	8/7/2008 16:01:03
Lat:	42.429837	**Lat:**	42.429950
Long:	-70.581879	**Long:**	-70.579981
Aft Draft:	18.53 ft	**Aft Draft:**	9.88 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/7/2008 12:21:00 PM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080808_114512

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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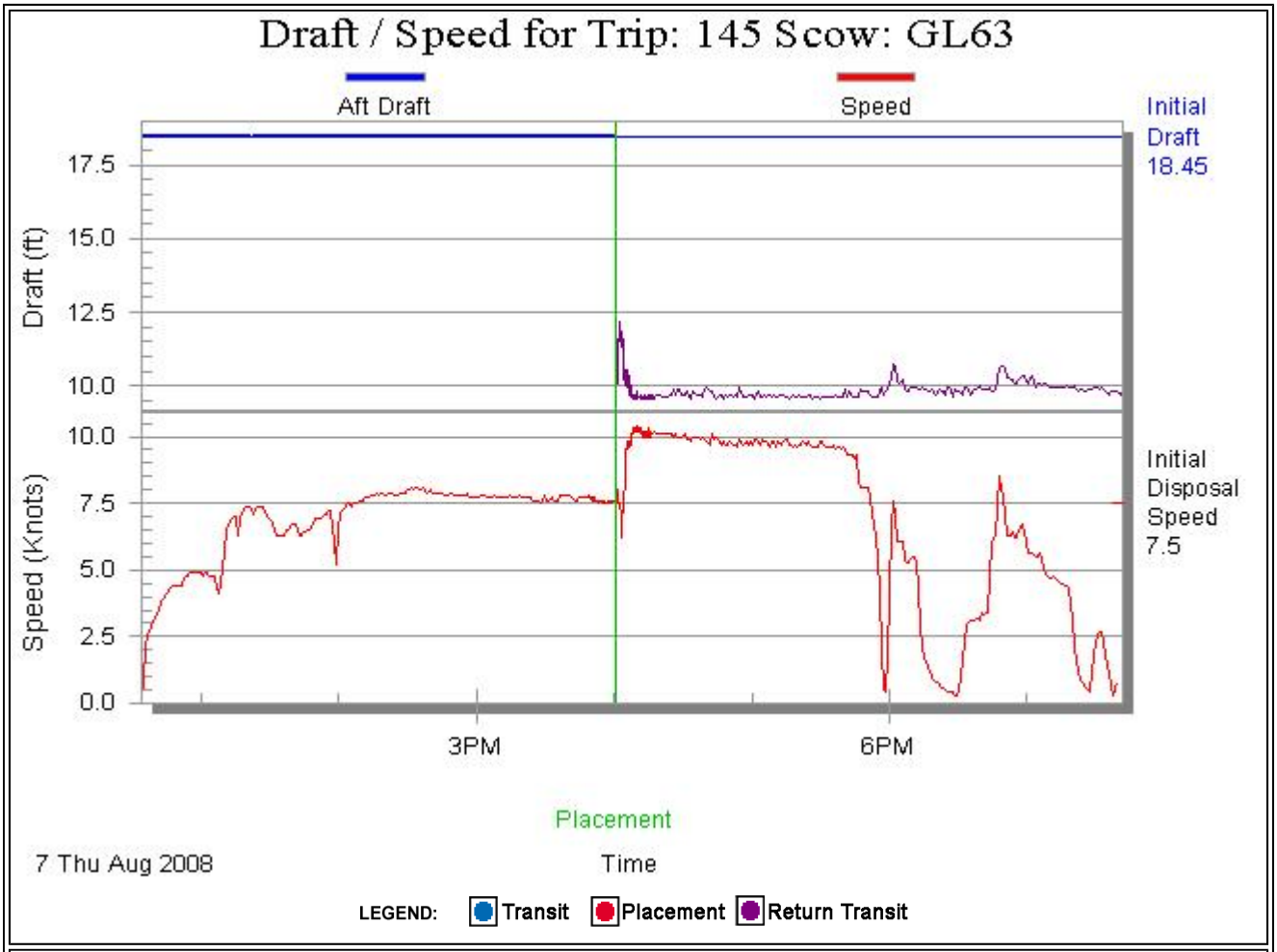


Trip Information

Trip #:	145
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/7/2008 12:33:48
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/7/2008 16:00:24
Latitude:	42.429837
Longitude:	-70.581879
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/7/2008 16:01:03
Latitude:	42.429950
Longitude:	-70.579981
Aft Draft:	9.88 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080808_114512

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

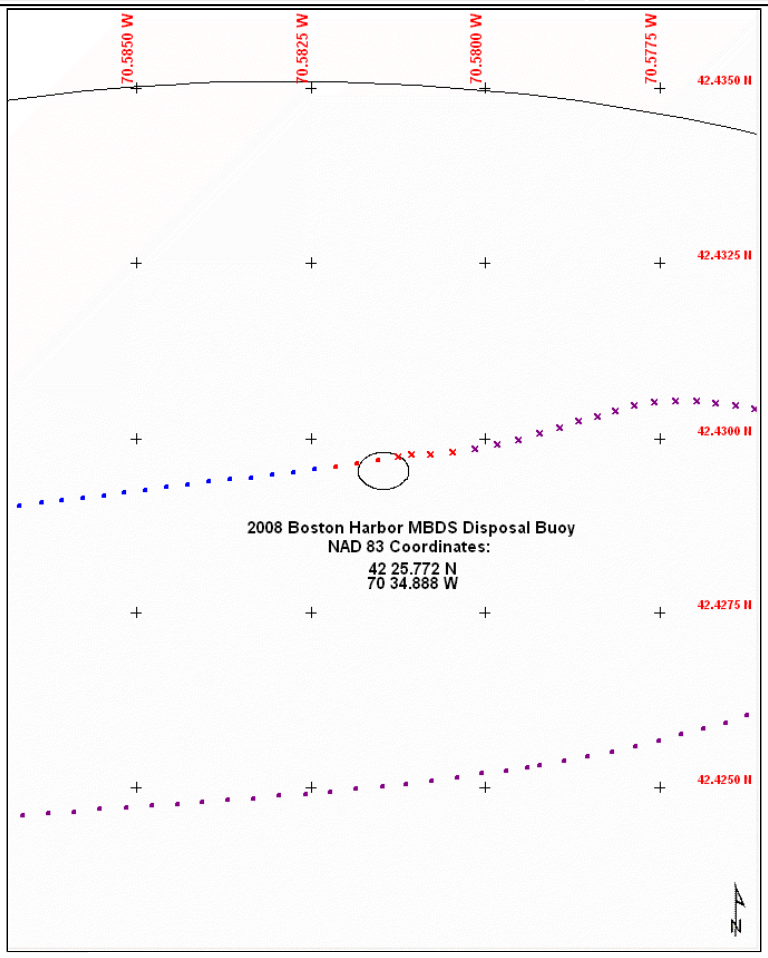
Trip #:	146
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/7/2008 19:57:58
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/7/2008 23:01:28	**Time:**	8/7/2008 23:02:01
Lat:	42.429601	**Lat:**	42.429805
Long:	-70.582153	**Long:**	-70.580463
Aft Draft:	20.10 ft	**Aft Draft:**	5.71 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/7/2008 7:28:00 PM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080808_111943

ADISS Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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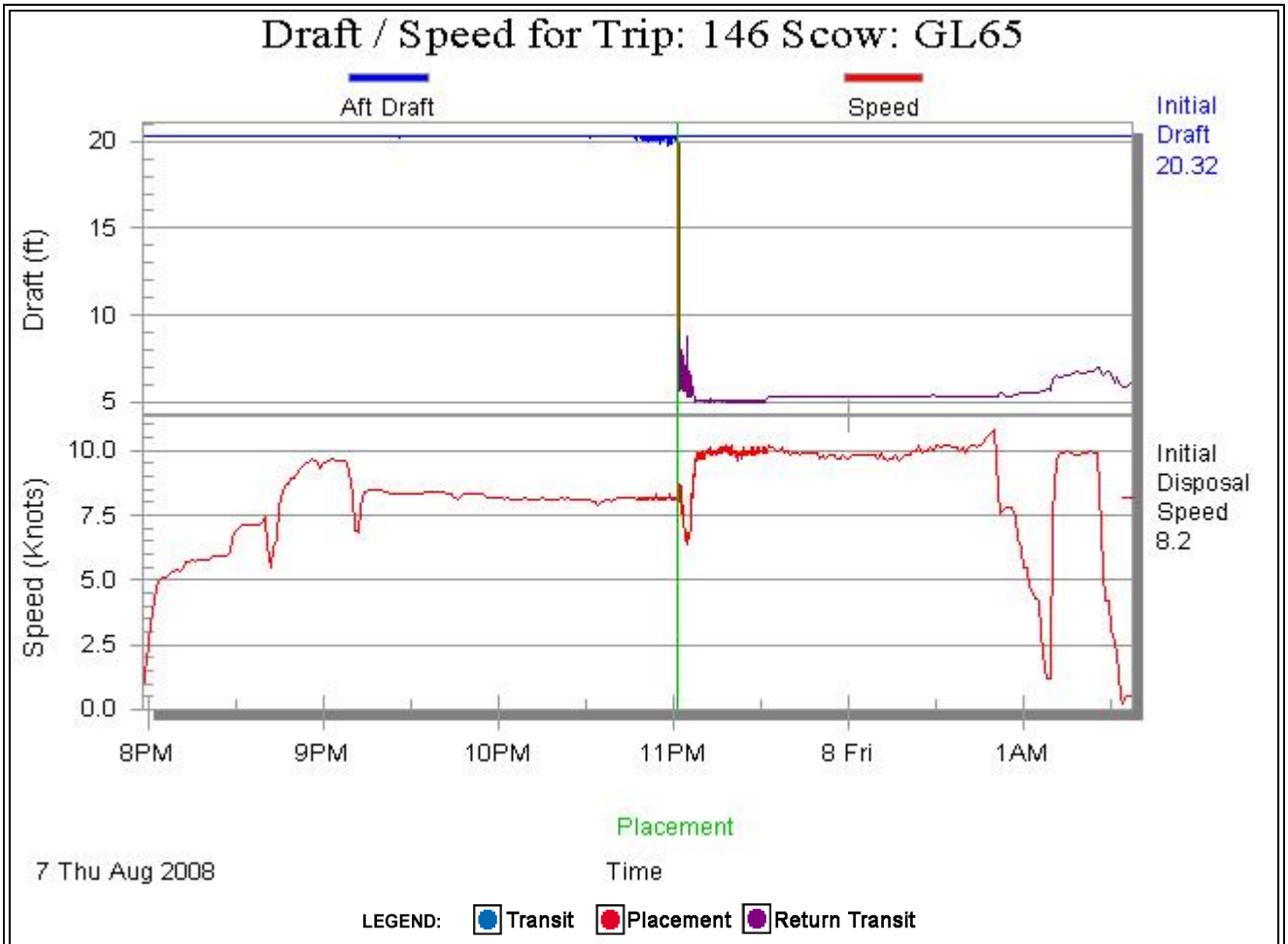


Trip Information

Trip #:	146
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/7/2008 19:57:58
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/7/2008 23:01:28
Latitude:	42.429601
Longitude:	-70.582153
Aft Draft:	20.10 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/7/2008 23:02:01
Latitude:	42.429805
Longitude:	-70.580463
Aft Draft:	5.71 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080808_111943

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

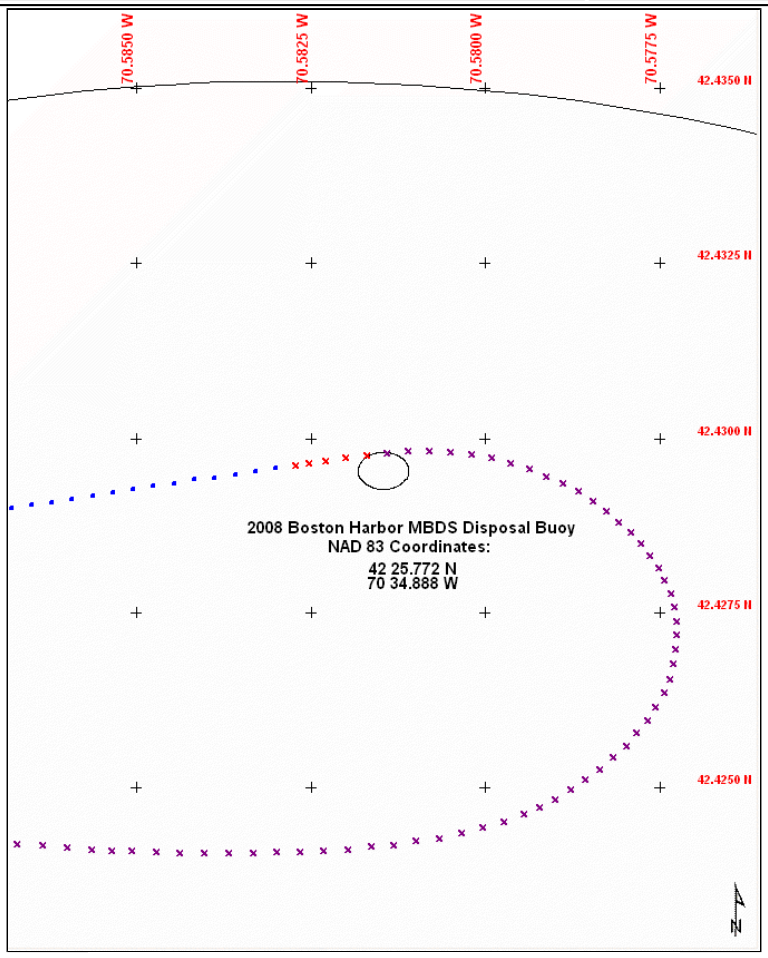
Trip #:	147
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/8/2008 03:10:42
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/8/2008 07:08:48	**Time:**	8/8/2008 07:09:09
Lat:	42.429617	**Lat:**	42.429762
Long:	-70.582721	**Long:**	-70.581703
Aft Draft:	18.53 ft	**Aft Draft:**	11.31 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/8/2008 2:51:00 AM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 080808_115500

ADISS
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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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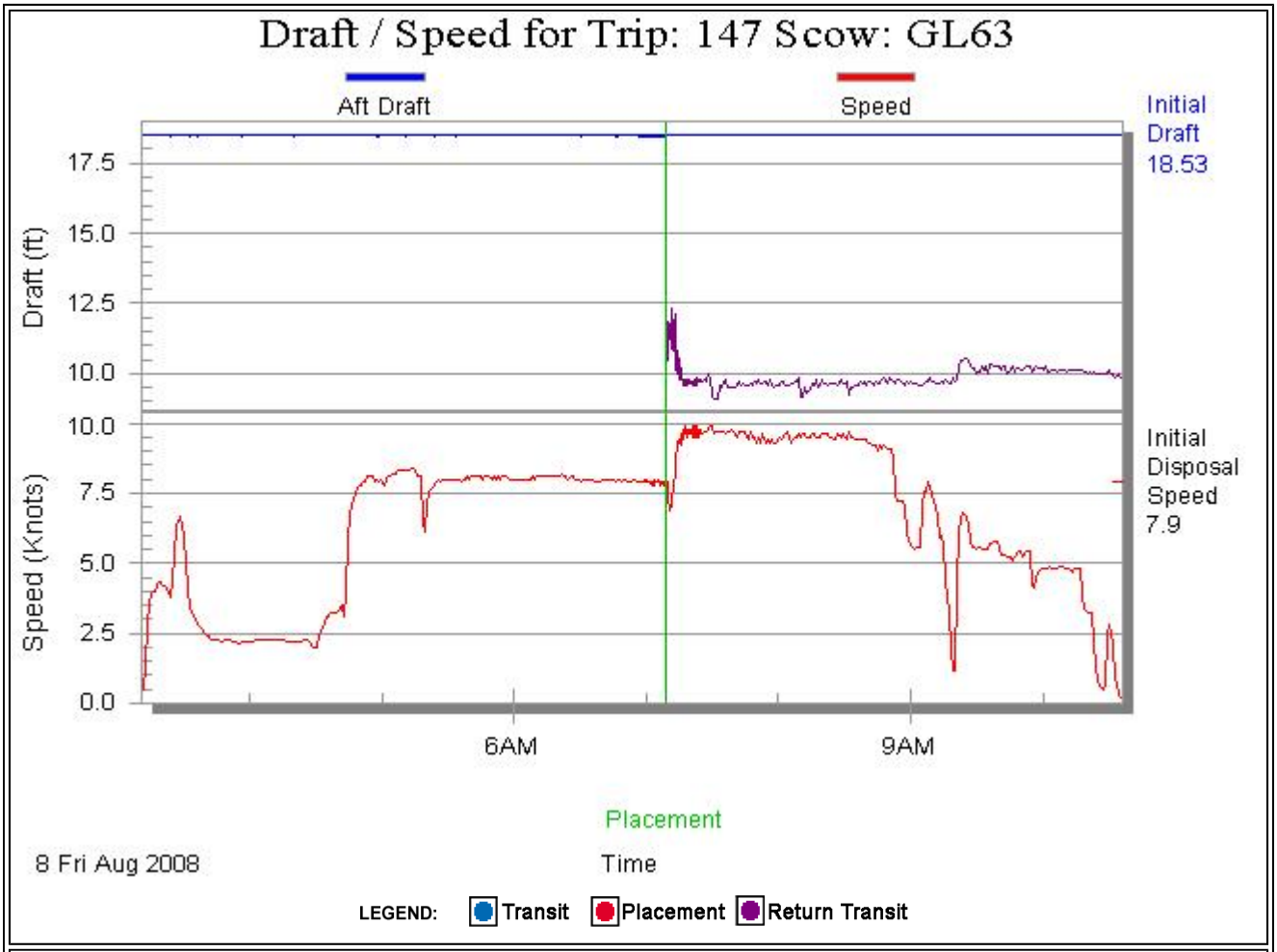


Trip Information

Trip #:	147
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/8/2008 03:10:42
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/8/2008 07:08:48
Latitude:	42.429617
Longitude:	-70.582721
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/8/2008 07:09:09
Latitude:	42.429762
Longitude:	-70.581703
Aft Draft:	11.31 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 080808_115500

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

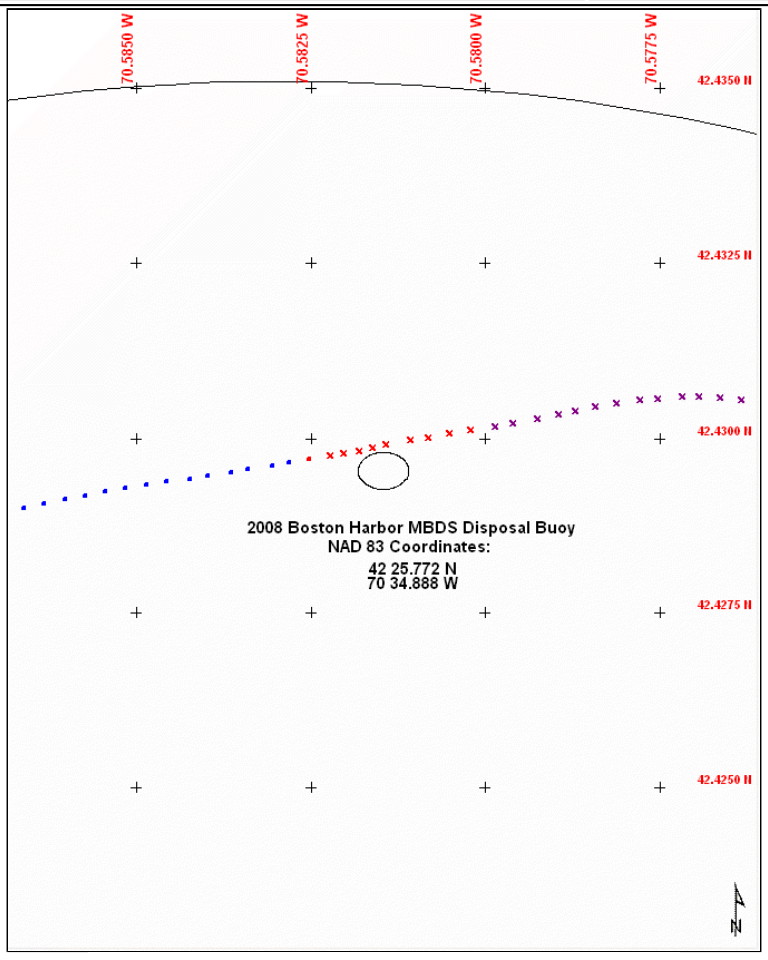
Trip #:	148
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/8/2008 10:50:58
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/8/2008 14:12:57	**Time:**	8/8/2008 14:13:44
Lat:	42.429708	**Lat:**	42.430114
Long:	-70.582528	**Long:**	-70.580215
Aft Draft:	18.70 ft	**Aft Draft:**	5.26 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/8/2008 10:19:00 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081108_132011

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W912WJ-07-C-0023

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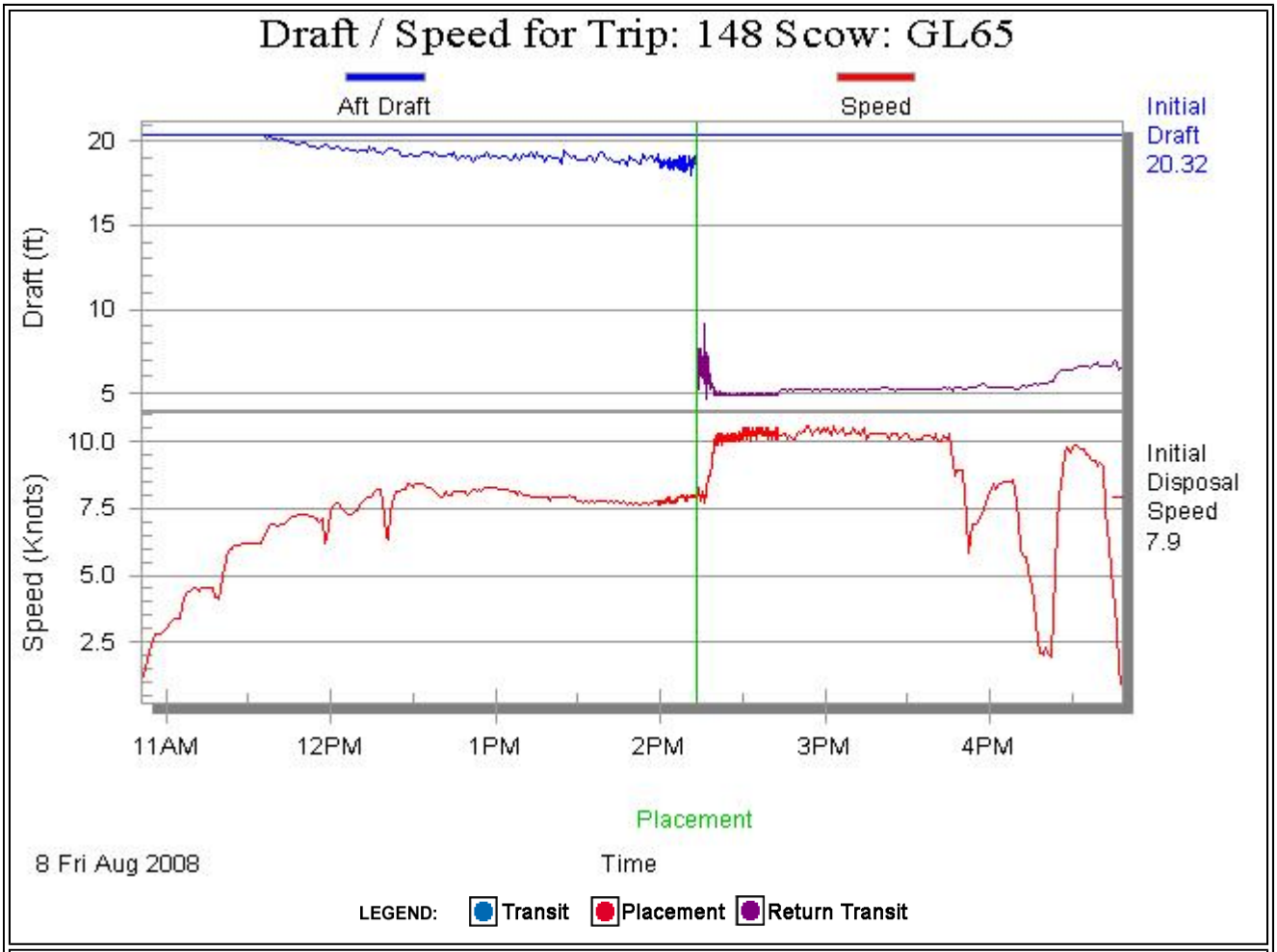


Trip Information

Trip #:	148
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/8/2008 10:50:58
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/8/2008 14:12:57
Latitude:	42.429708
Longitude:	-70.582528
Aft Draft:	18.70 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/8/2008 14:13:44
Latitude:	42.430114
Longitude:	-70.580215
Aft Draft:	5.26 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_132011

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

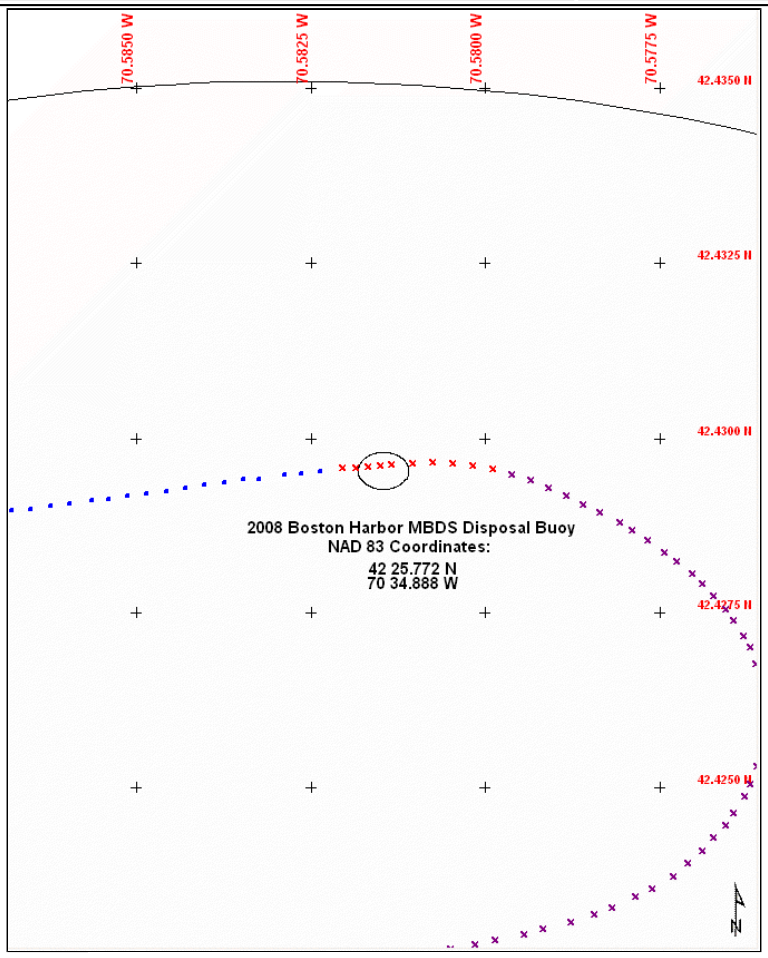
Trip #:	149
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/8/2008 20:07:42
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/8/2008 23:13:12	**Time:**	8/8/2008 23:13:58
Lat:	42.429573	**Lat:**	42.429558
Long:	-70.582054	**Long:**	-70.579896
Aft Draft:	18.53 ft	**Aft Draft:**	11.15 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/8/2008 7:54:00 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor remained in the OPEN position during the return transit of load #149. The sensor switched back to CLOSED after returning to the dredge area.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081108_132222

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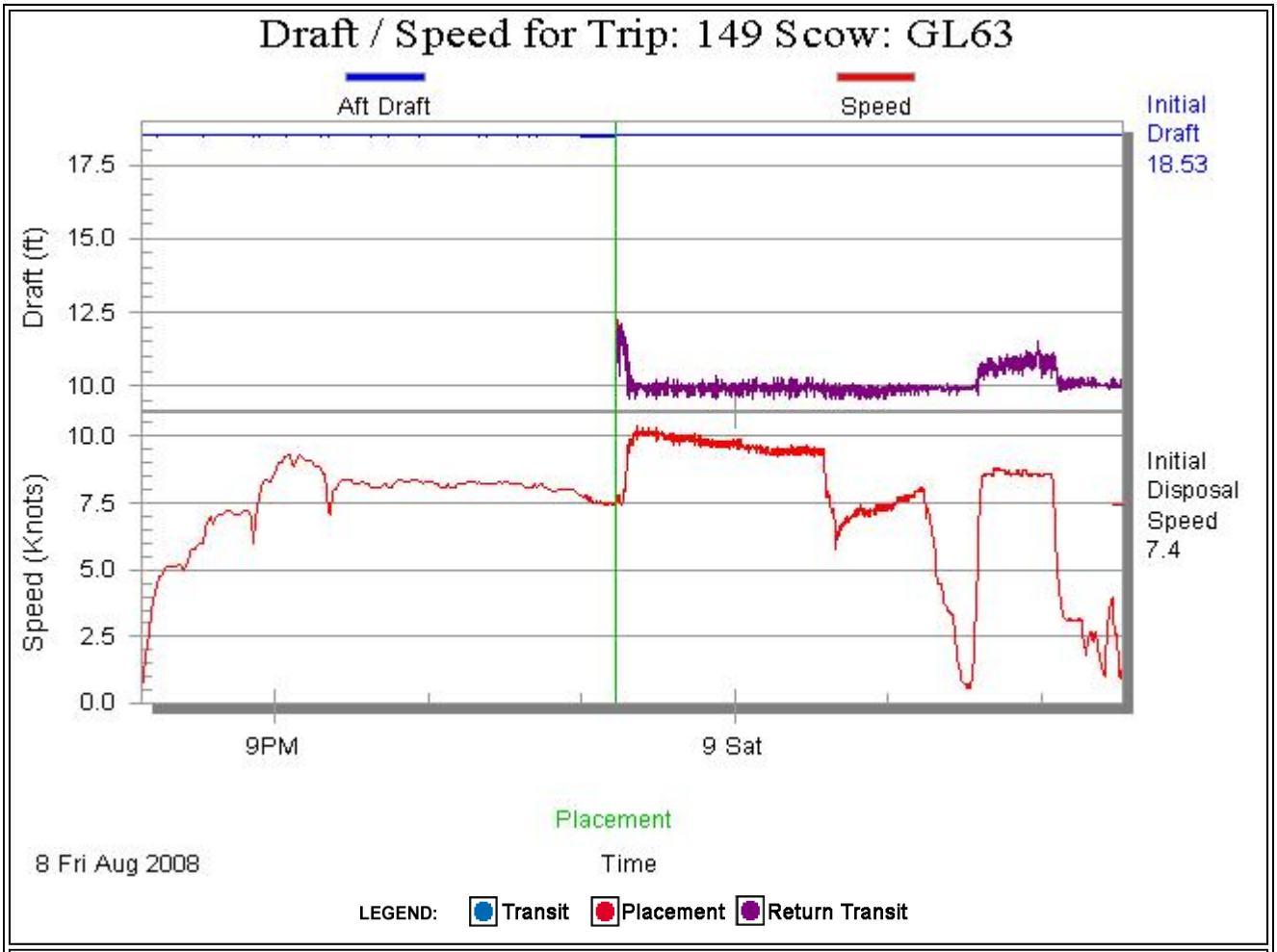


Trip Information

Trip #:	149
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/8/2008 20:07:42
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/8/2008 23:13:12	**Time:**	8/8/2008 23:13:58
Latitude:	42.429573	**Latitude:**	42.429558
Longitude:	-70.582054	**Longitude:**	-70.579896
Aft Draft:	18.53 ft	**Aft Draft:**	11.15 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor remained in the OPEN position during the return transit of load #149. The sensor switched back to CLOSED after returning to the dredge area.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_132222

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

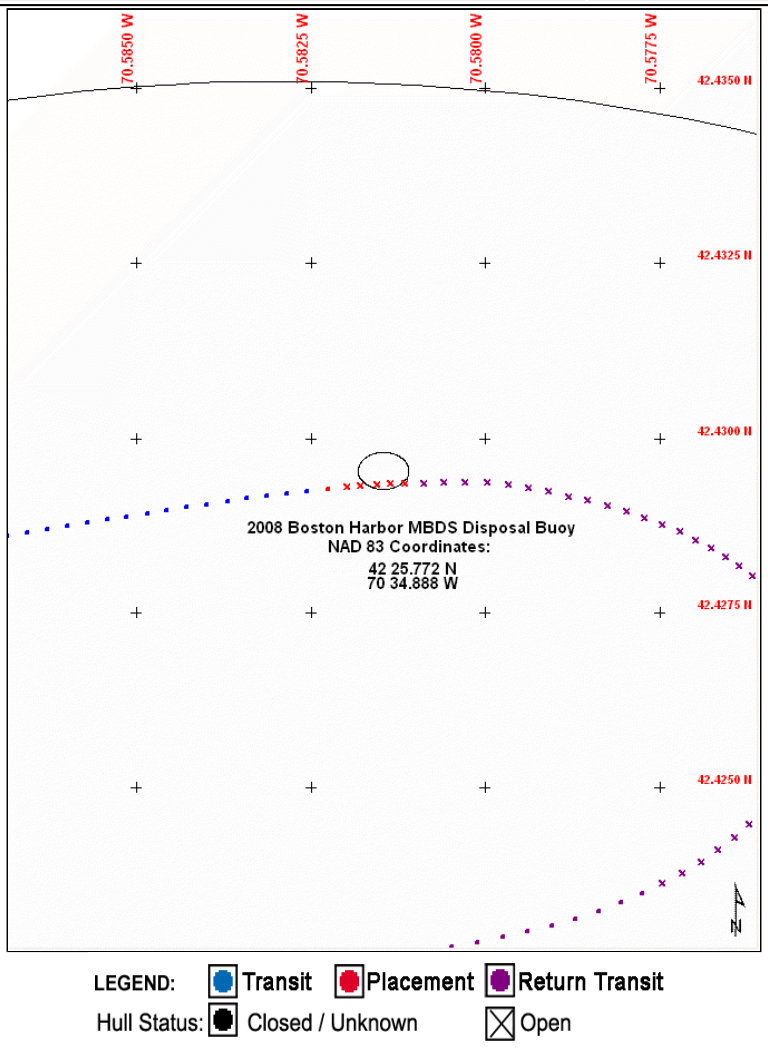
Trip #:	150
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/9/2008 03:17:15
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/9/2008 07:19:21	**Time:**	8/9/2008 07:19:44
Lat:	42.429255	**Lat:**	42.429350
Long:	-70.582271	**Long:**	-70.581157
Aft Draft:	20.17 ft	**Aft Draft:**	6.15 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/9/2008 7:54:00 AM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081108_132046

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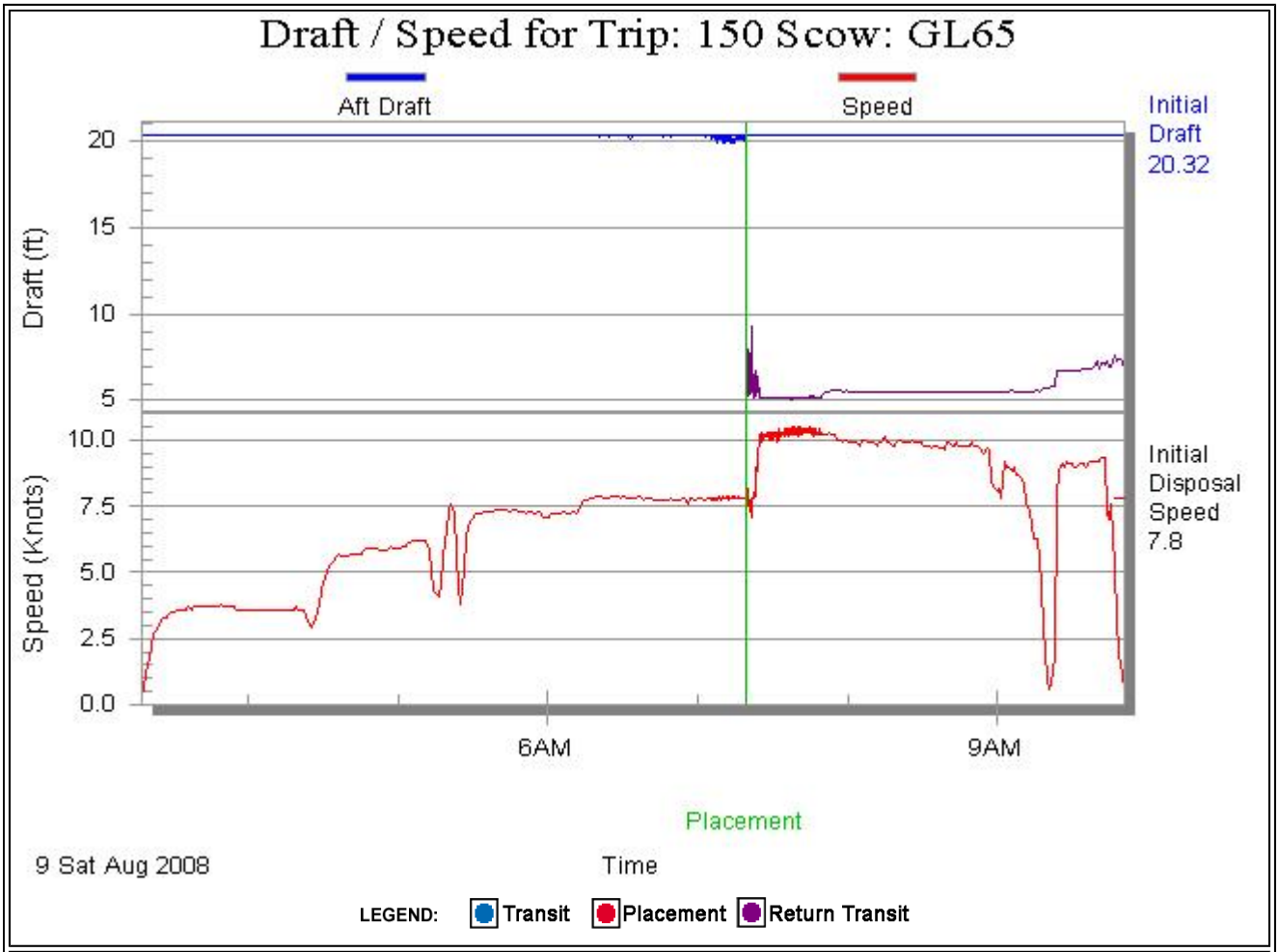


Trip Information

Trip #:	150
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/9/2008 03:17:15
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/9/2008 07:19:21
Latitude:	42.429255
Longitude:	-70.582271
Aft Draft:	20.17 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/9/2008 07:19:44
Latitude:	42.429350
Longitude:	-70.581157
Aft Draft:	6.15 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_132046

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

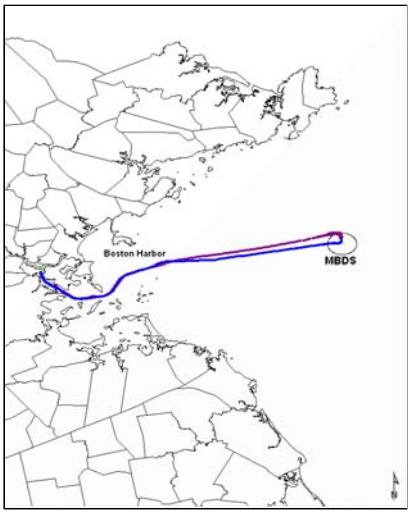
Trip Information:

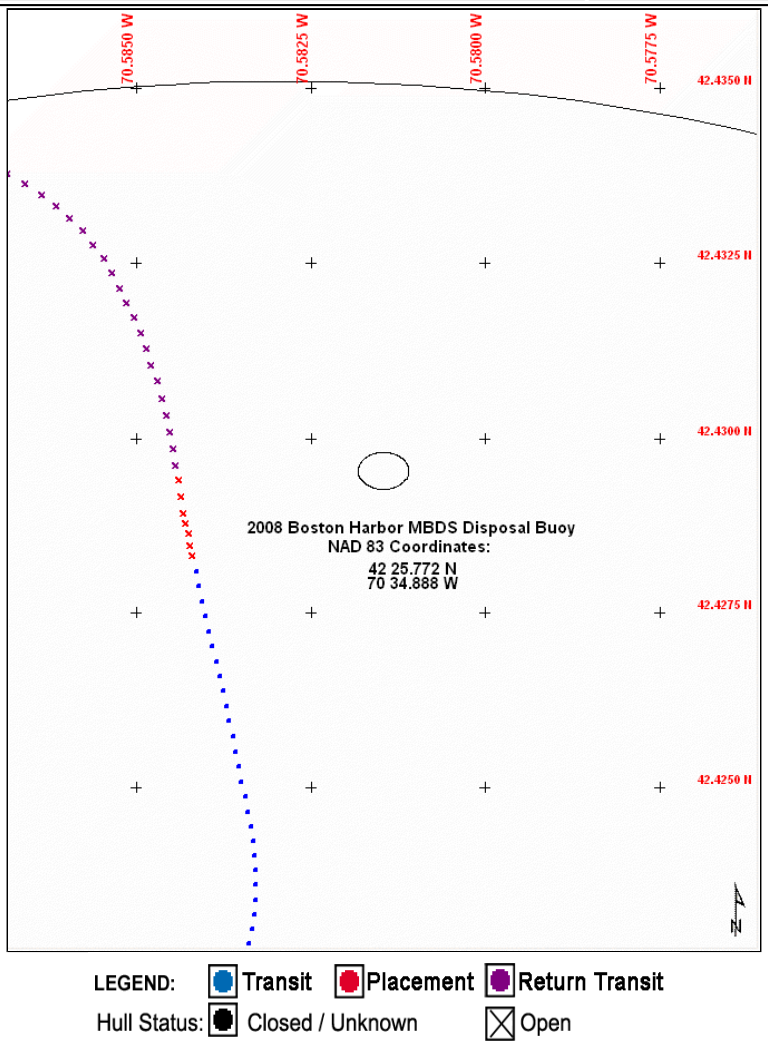
Trip #:	151
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/9/2008 11:13:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/9/2008 14:34:17	**Time:**	8/9/2008 14:34:46
Lat:	42.428305	**Lat:**	42.429382
Long:	-70.584202	**Long:**	-70.584397
Aft Draft:	18.61 ft	**Aft Draft:**	9.64 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/9/2008 10:52:00 AM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081108_132259

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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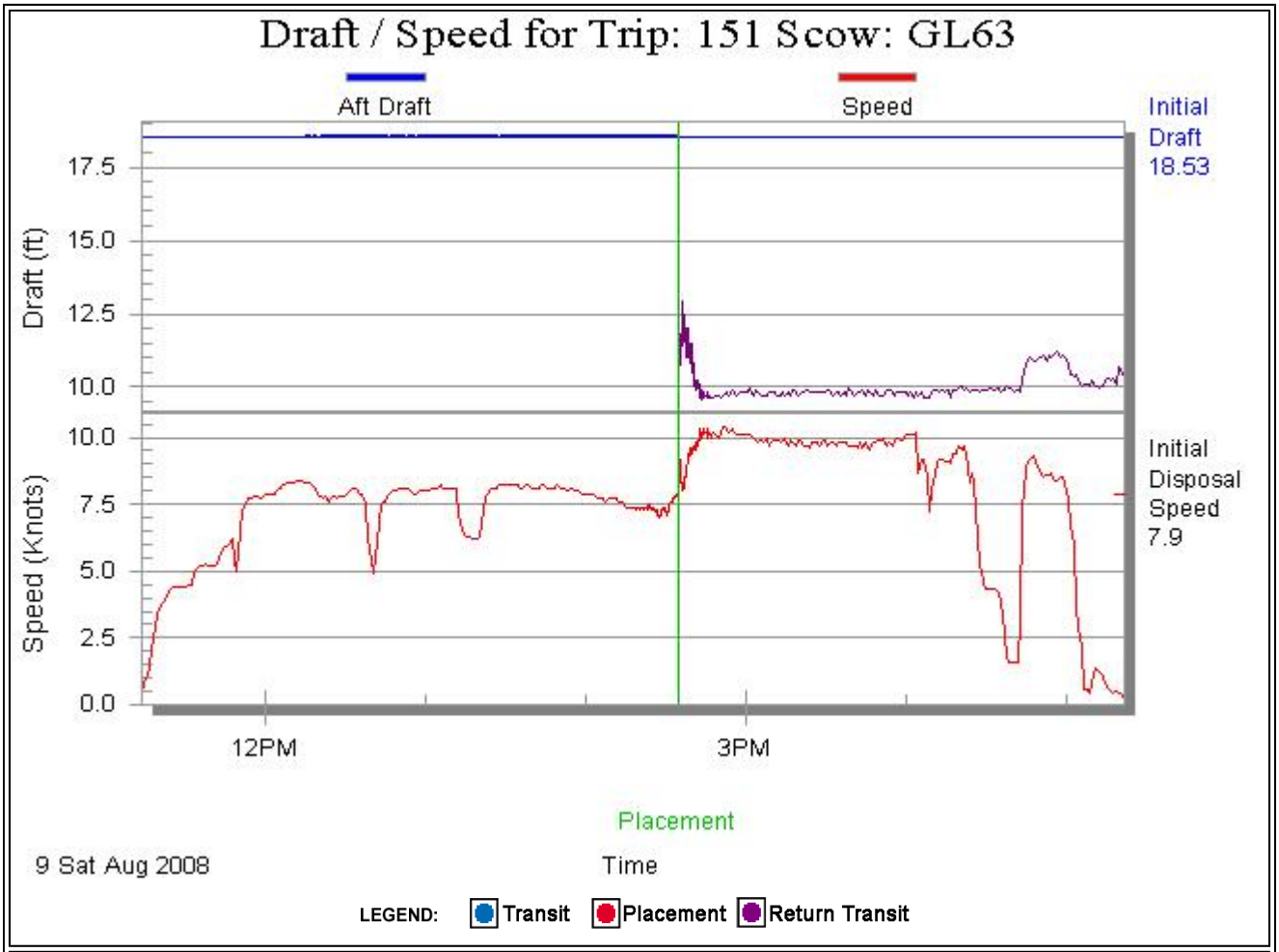


Trip Information

Trip #:	151
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/9/2008 11:13:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/9/2008 14:34:17
Latitude:	42.428305
Longitude:	-70.584202
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/9/2008 14:34:46
Latitude:	42.429382
Longitude:	-70.584397
Aft Draft:	9.64 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_132259

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

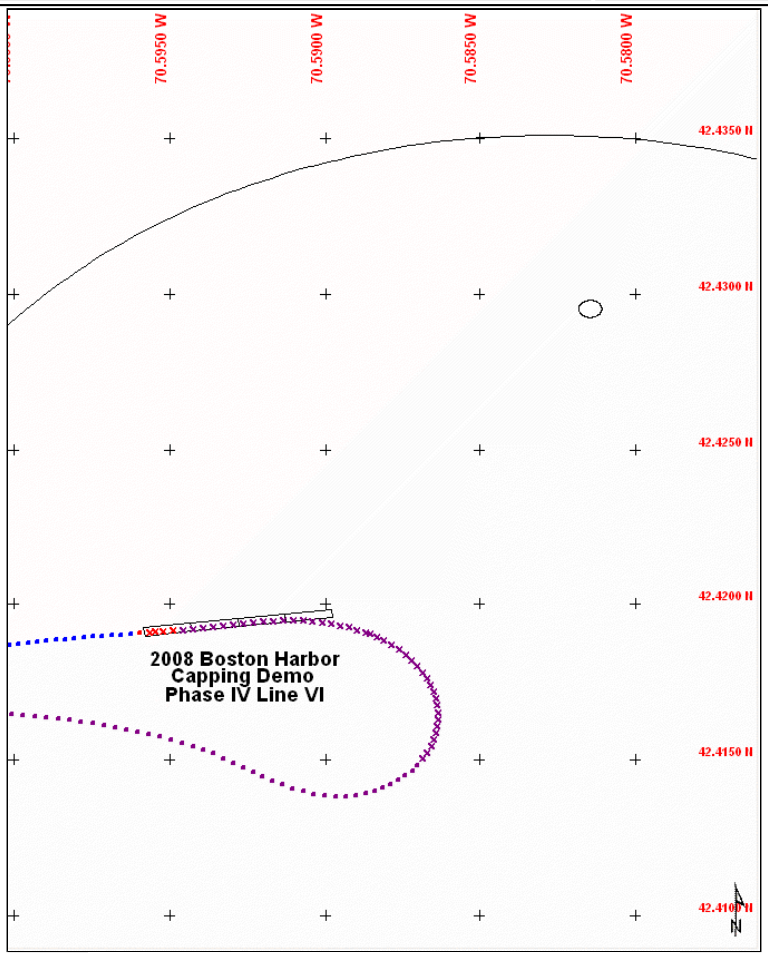
Trip #:	152
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	8/9/2008 18:44:39
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/9/2008 21:54:51	**Time:**	8/9/2008 21:55:12
Lat:	42.419068	**Lat:**	42.419153
Long:	-70.595966	**Long:**	-70.594889
Aft Draft:	20.32 ft	**Aft Draft:**	4.97 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/9/2008 10:25:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081108_133005

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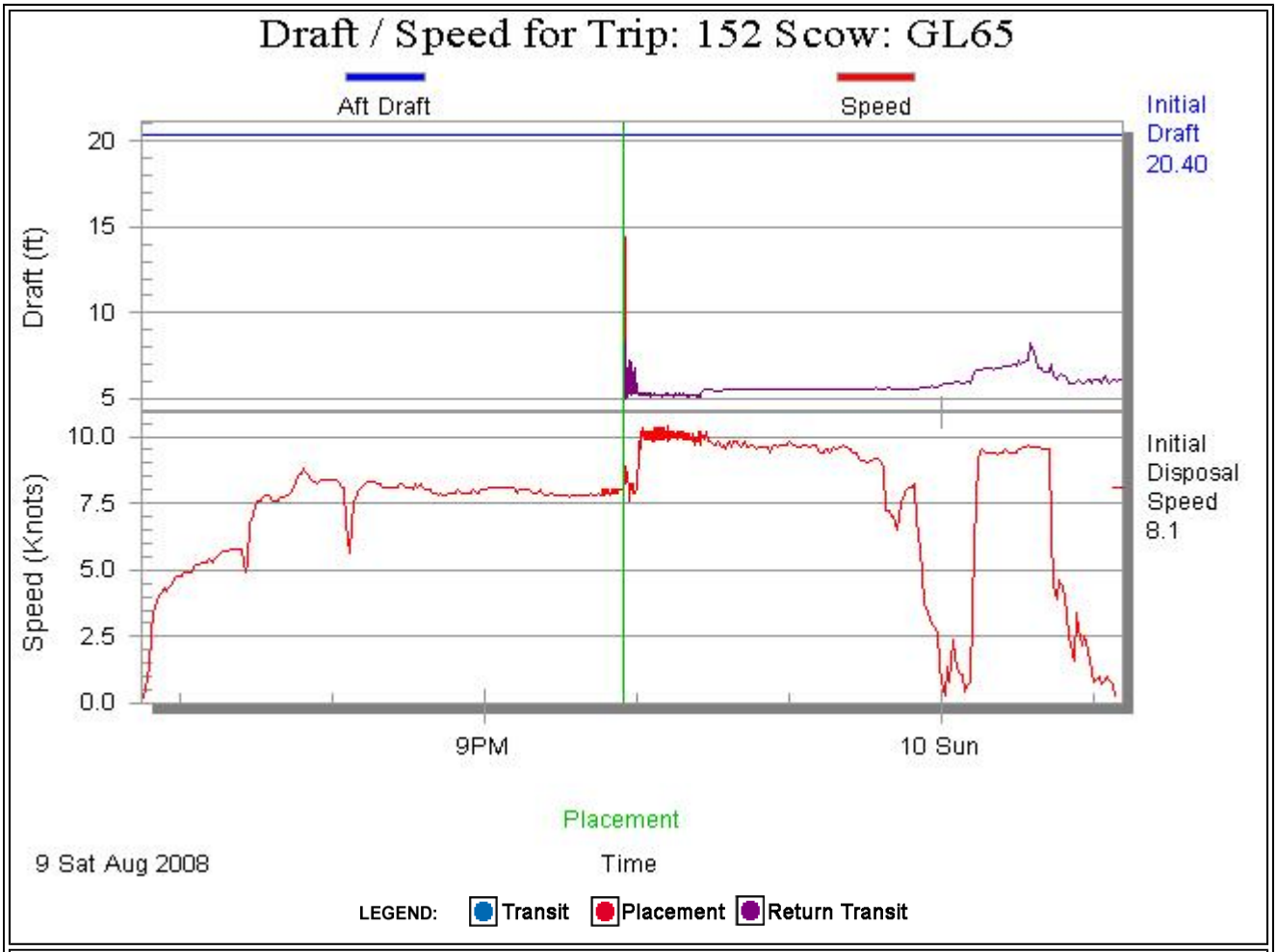


Trip Information

Trip #:	152
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	8/9/2008 18:44:39
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/9/2008 21:54:51
Latitude:	42.419068
Longitude:	-70.595966
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/9/2008 21:55:12
Latitude:	42.419153
Longitude:	-70.594889
Aft Draft:	4.97 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_133005

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

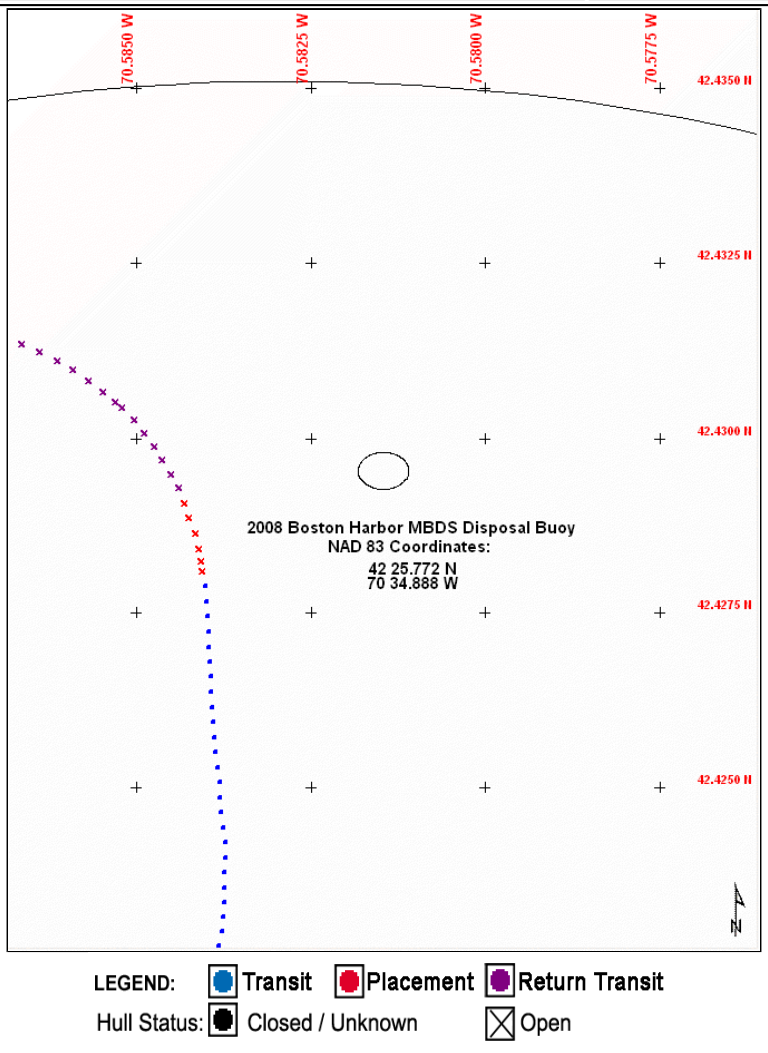
Trip #:	153
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/10/2008 01:38:31
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/10/2008 05:02:23	**Time:**	8/10/2008 05:02:50
Lat:	42.428089	**Lat:**	42.429056
Long:	-70.584060	**Long:**	-70.584314
Aft Draft:	18.53 ft	**Aft Draft:**	9.17 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/10/2008 1:13:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081108_132448

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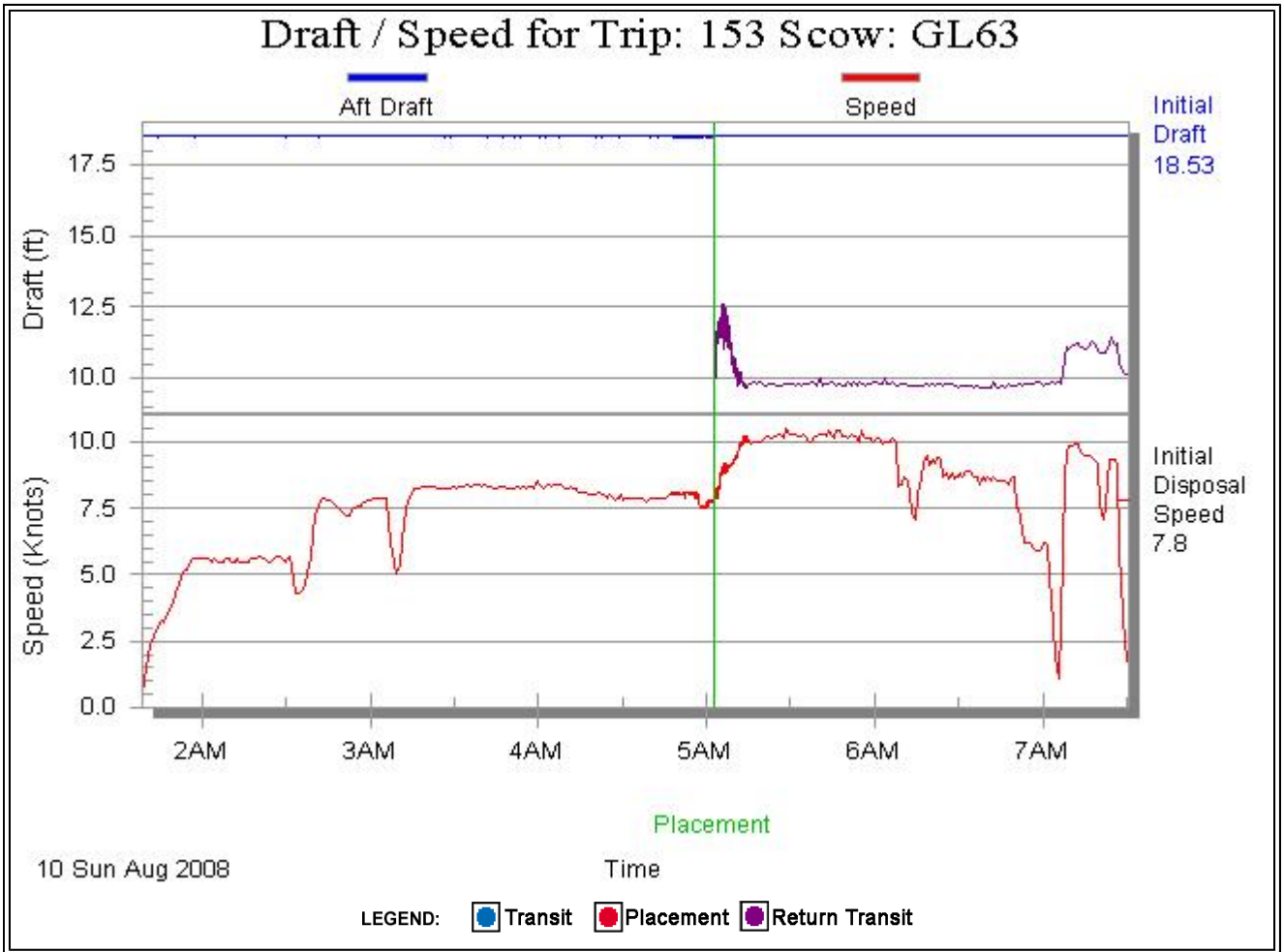


Trip Information

Trip #:	153
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/10/2008 01:38:31
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/10/2008 05:02:23
Latitude:	42.428089
Longitude:	-70.584060
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/10/2008 05:02:50
Latitude:	42.429056
Longitude:	-70.584314
Aft Draft:	9.17 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_132448

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	154
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/10/2008 10:44:09
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

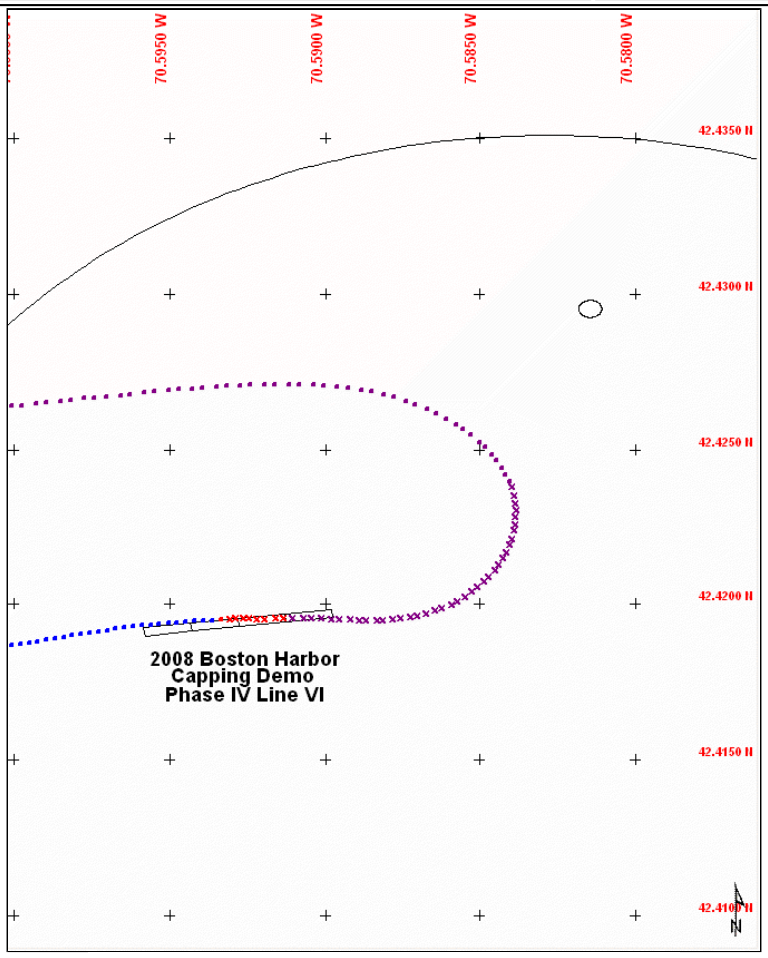
Placement Start:		**Placement End:**	
Time:	8/10/2008 13:51:08	**Time:**	8/10/2008 13:51:49
Lat:	42.419508	**Lat:**	42.419551
Long:	-70.593352	**Long:**	-70.591353
Aft Draft:	20.40 ft	**Aft Draft:**	6.59 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/10/2008 11:43:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_133034

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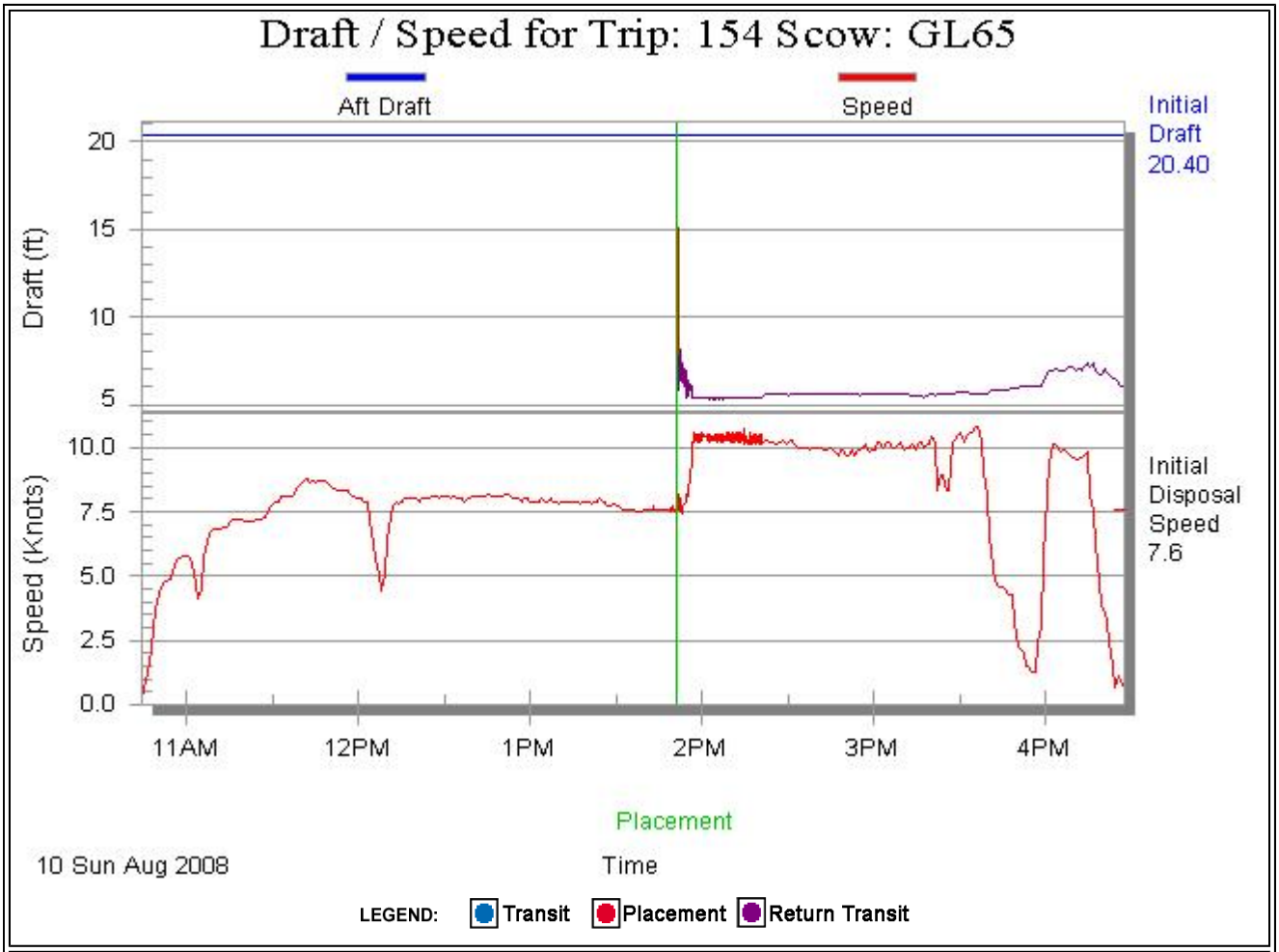


Trip Information

Trip #:	154
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/10/2008 10:44:09
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/10/2008 13:51:08
Latitude:	42.419508
Longitude:	-70.593352
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/10/2008 13:51:49
Latitude:	42.419551
Longitude:	-70.591353
Aft Draft:	6.59 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_133034

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

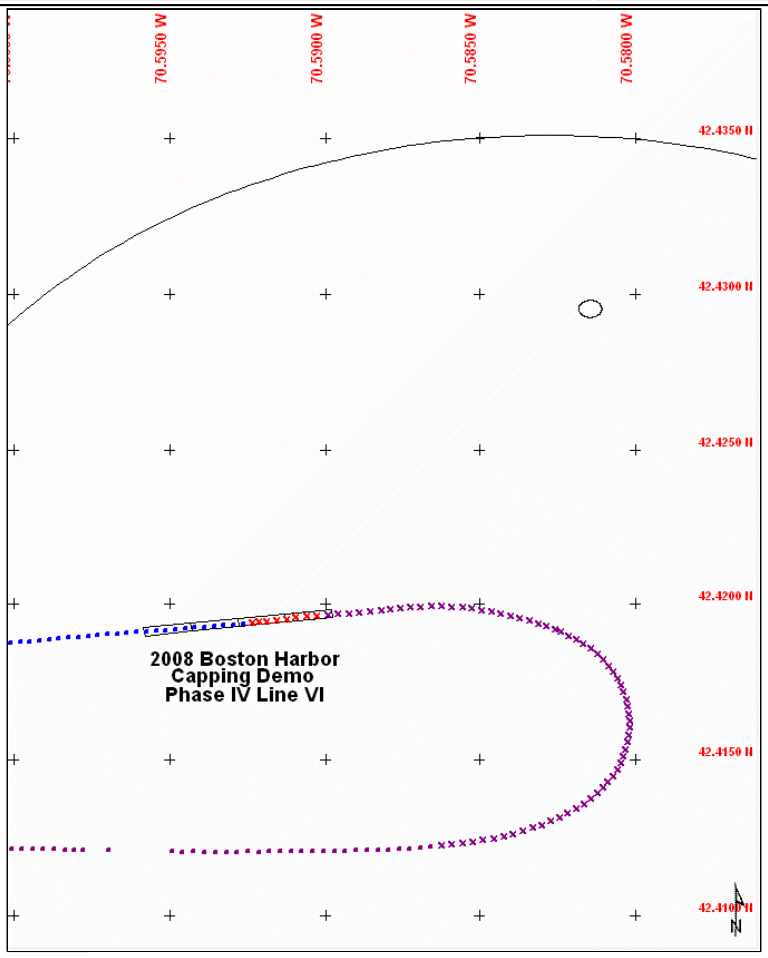
Trip #:	155
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/10/2008 19:10:37
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/10/2008 22:11:35	**Time:**	8/10/2008 22:12:14
Lat:	42.419398	**Lat:**	42.419625
Long:	-70.592345	**Long:**	-70.590272
Aft Draft:	18.53 ft	**Aft Draft:**	10.04 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/10/2008 6:40:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081108_133101

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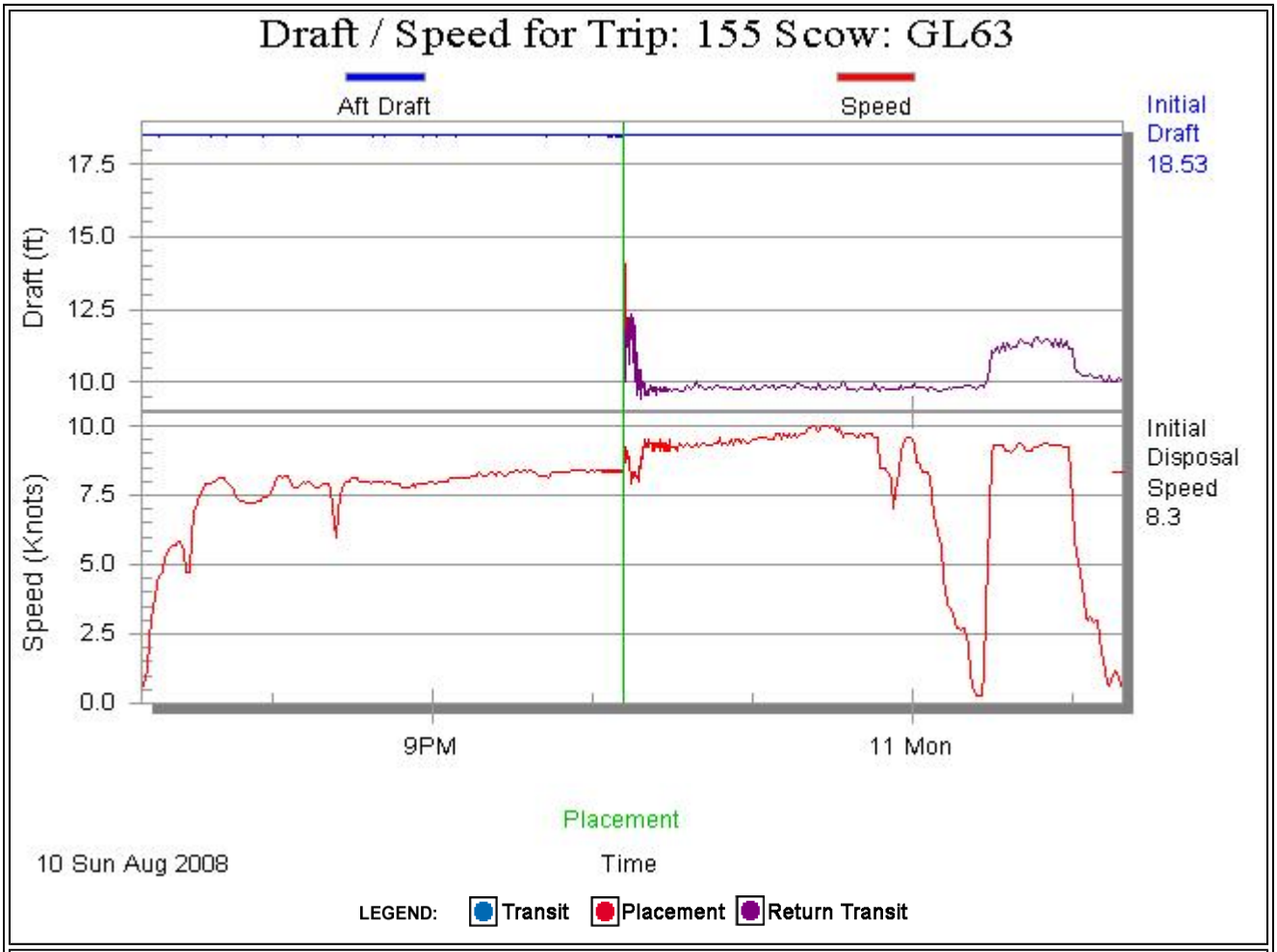


Trip Information

Trip #:	155
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/10/2008 19:10:37
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/10/2008 22:11:35
Latitude:	42.419398
Longitude:	-70.592345
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/10/2008 22:12:14
Latitude:	42.419625
Longitude:	-70.590272
Aft Draft:	10.04 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_133101

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	156
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/11/2008 01:53:27
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

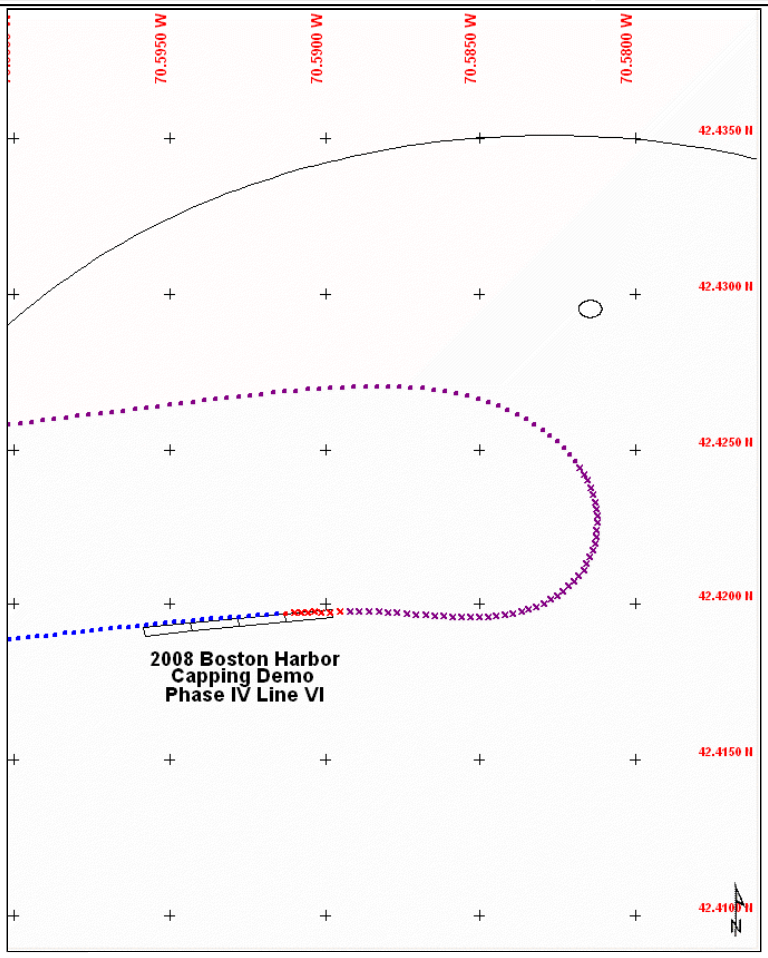
Placement Start:		**Placement End:**	
Time:	8/11/2008 05:15:02	**Time:**	8/11/2008 05:15:37
Lat:	42.419702	**Lat:**	42.419755
Long:	-70.591288	**Long:**	-70.589531
Aft Draft:	19.44 ft	**Aft Draft:**	6.81 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/11/2008 1:11:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_133205

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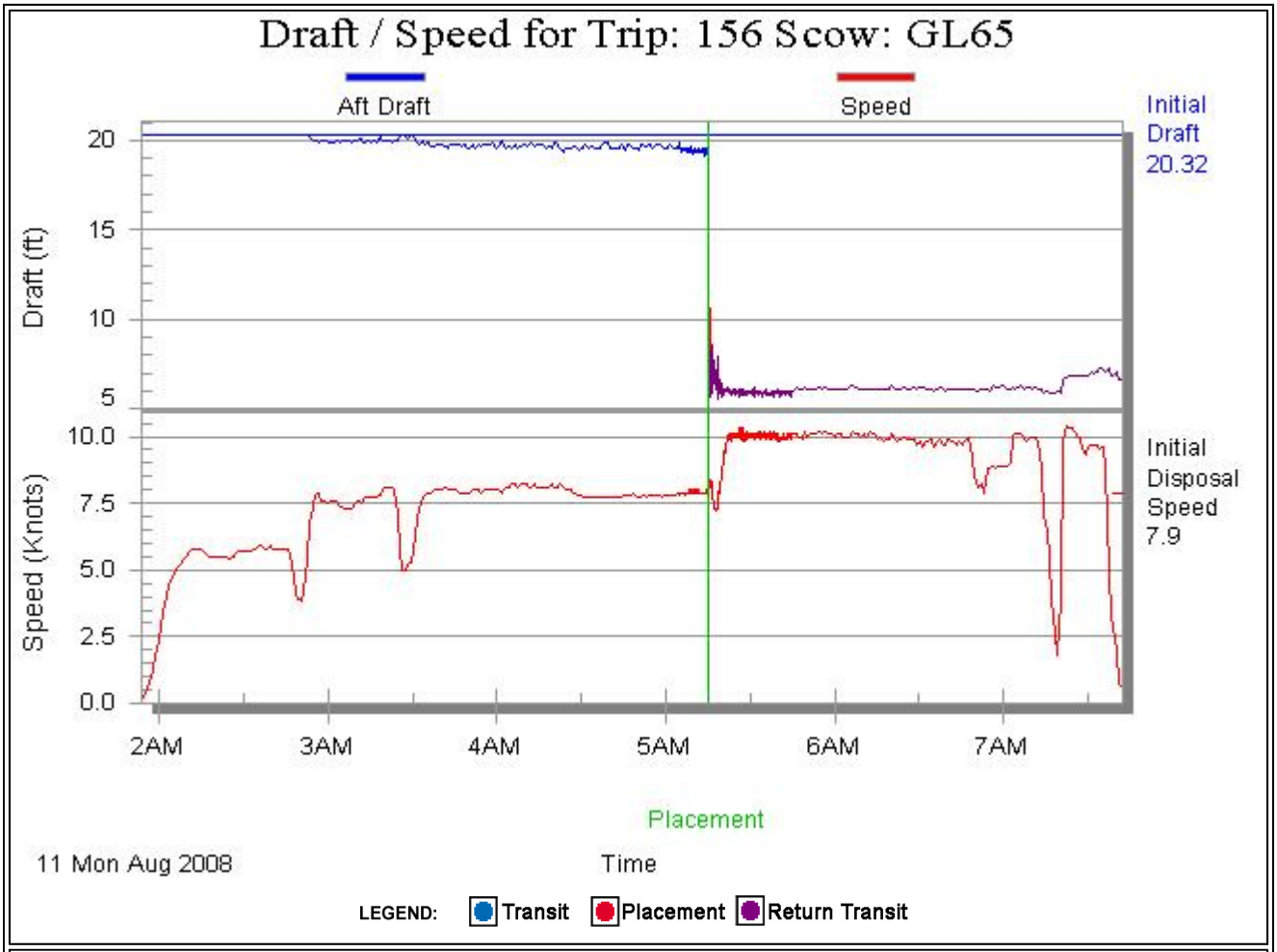


Trip Information

Trip #:	156
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/11/2008 01:53:27
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/11/2008 05:15:02
Latitude:	42.419702
Longitude:	-70.591288
Aft Draft:	19.44 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/11/2008 05:15:37
Latitude:	42.419755
Longitude:	-70.589531
Aft Draft:	6.81 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081108_133205

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

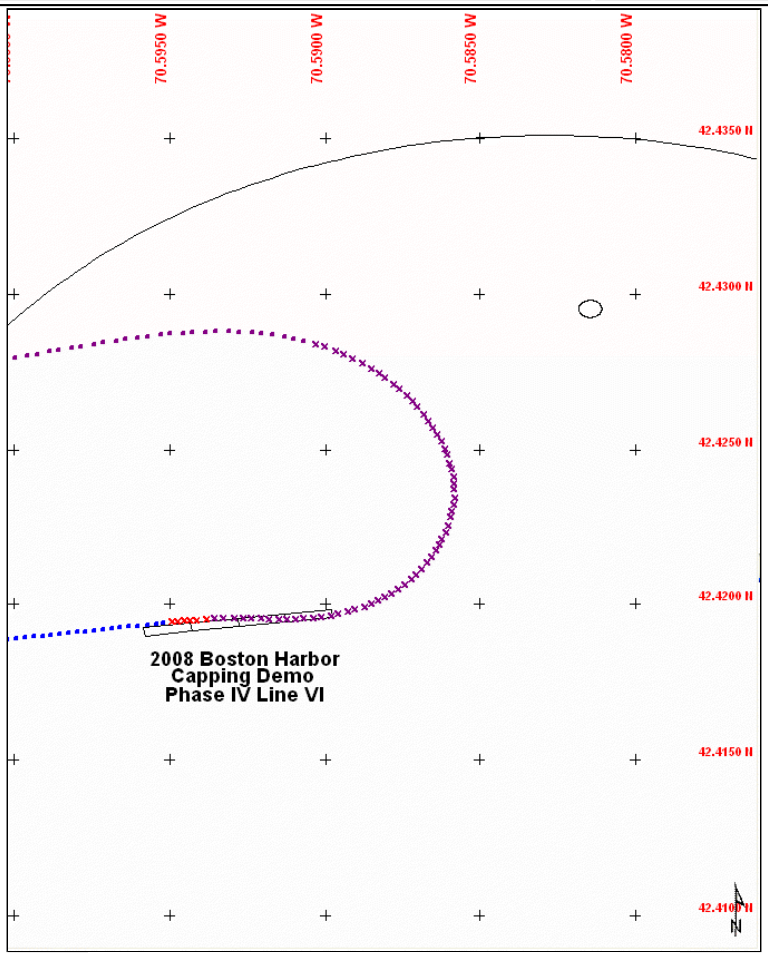
Trip #:	157
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/11/2008 09:42:09
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/11/2008 12:54:04	**Time:**	8/11/2008 12:54:28
Lat:	42.419423	**Lat:**	42.419513
Long:	-70.594932	**Long:**	-70.593816
Aft Draft:	18.53 ft	**Aft Draft:**	9.88 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/11/2008 9:20:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081208_120839

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W912WJ-07-C-0023

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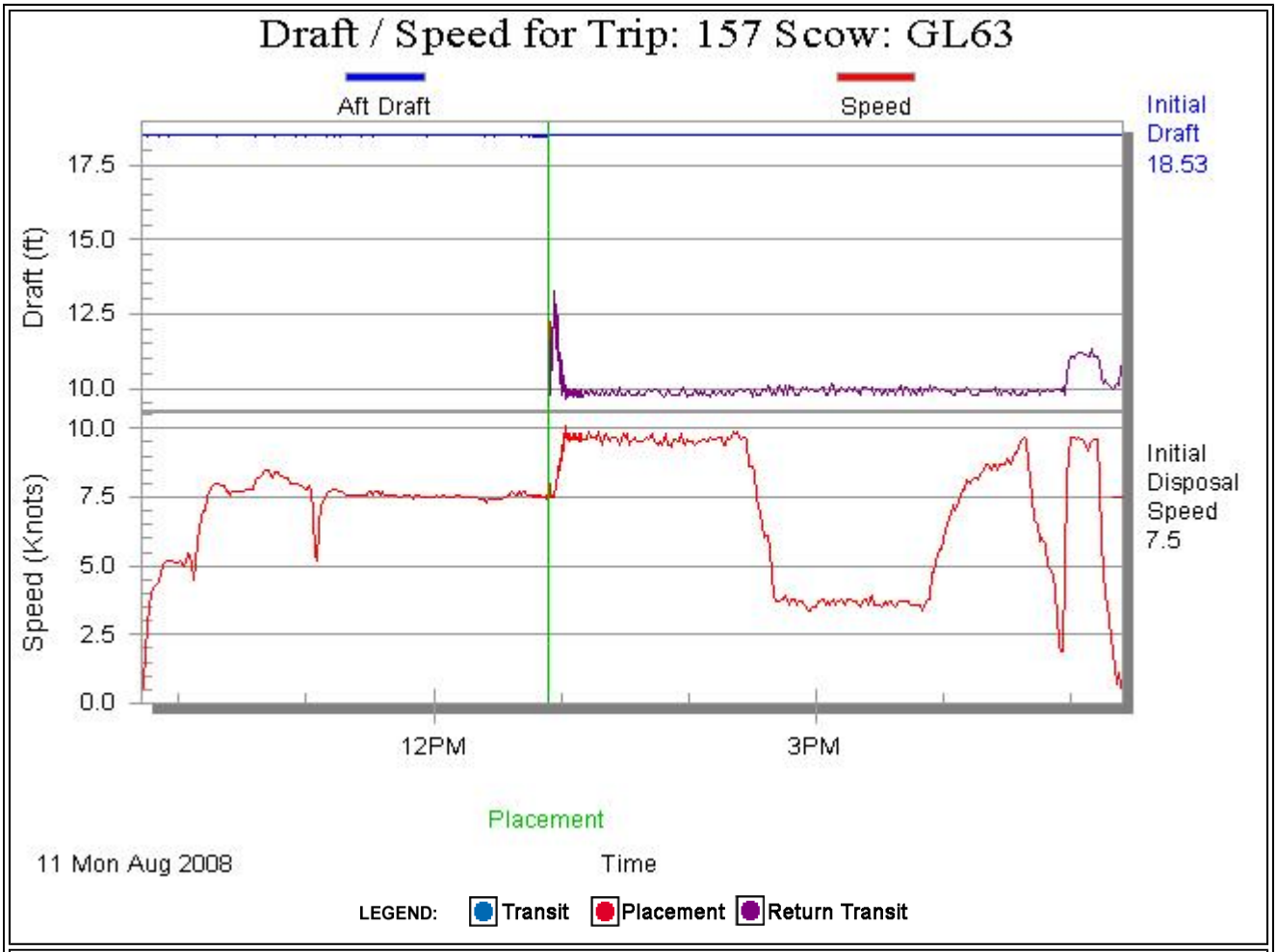


Trip Information

Trip #:	157
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/11/2008 09:42:09
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/11/2008 12:54:04
Latitude:	42.419423
Longitude:	-70.594932
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/11/2008 12:54:28
Latitude:	42.419513
Longitude:	-70.593816
Aft Draft:	9.88 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081208_120839

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

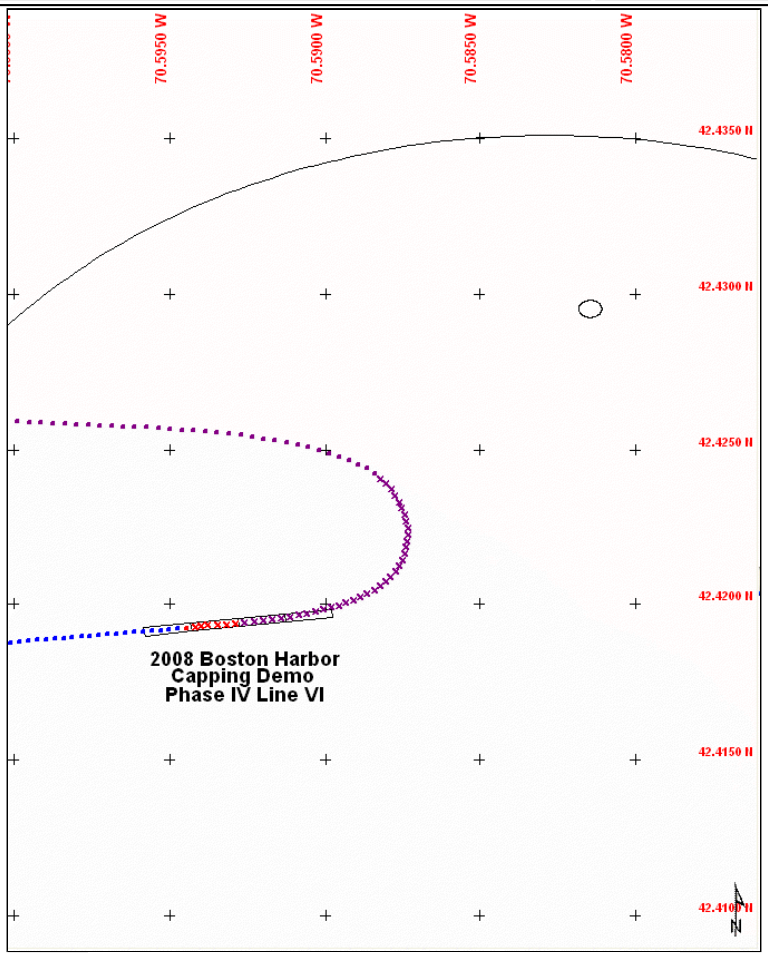
Trip #:	158
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/11/2008 19:22:00
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/11/2008 22:29:20	**Time:**	8/11/2008 22:29:53
Lat:	42.419240	**Lat:**	42.419366
Long:	-70.594467	**Long:**	-70.592887
Aft Draft:	20.32 ft	**Aft Draft:**	6.89 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/11/2008 7:19:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081208_120442

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W912WJ-07-C-0023

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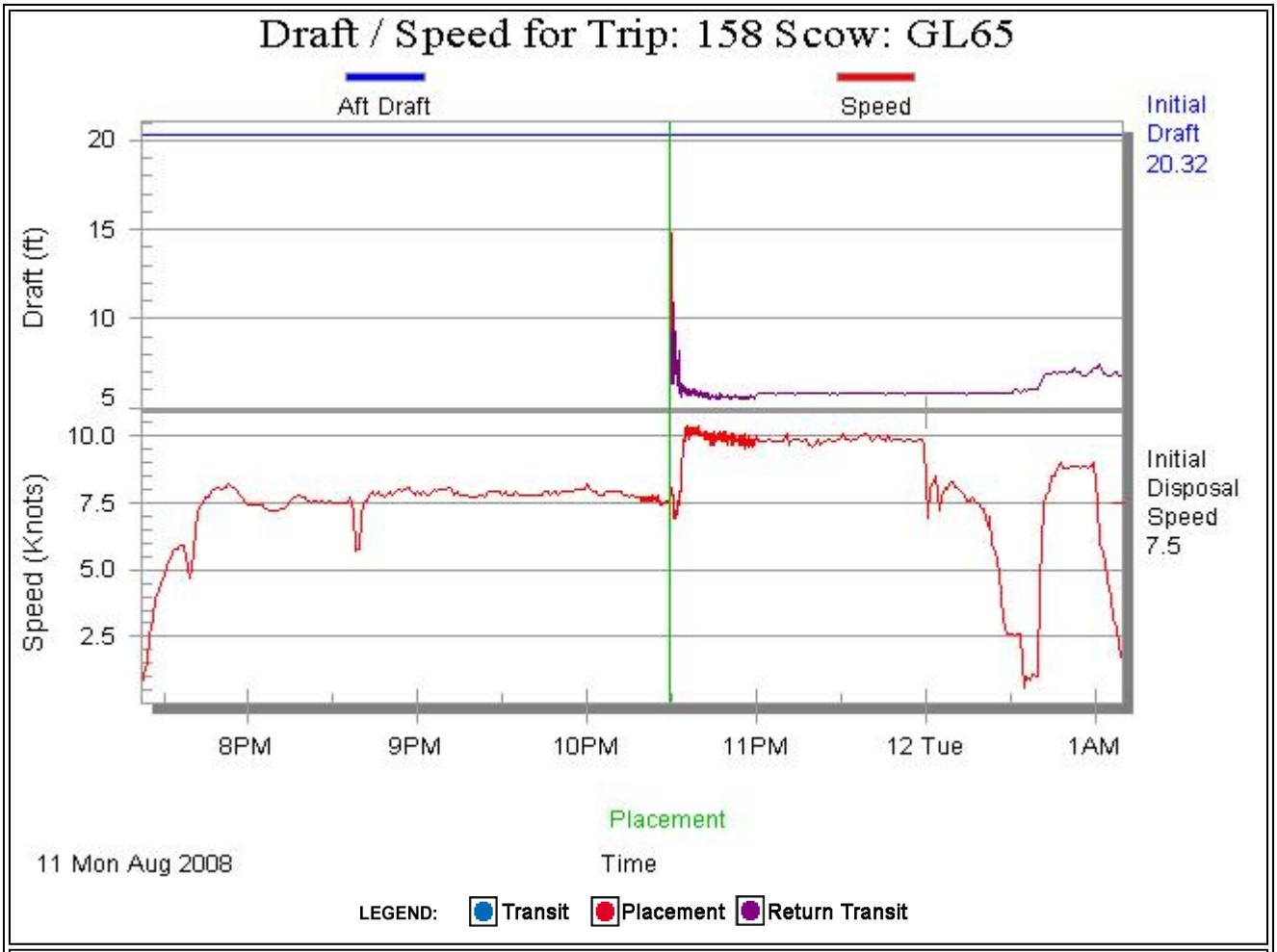


Trip Information

Trip #:	158
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/11/2008 19:22:00
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/11/2008 22:29:20
Latitude:	42.419240
Longitude:	-70.594467
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/11/2008 22:29:53
Latitude:	42.419366
Longitude:	-70.592887
Aft Draft:	6.89 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081208_120442

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

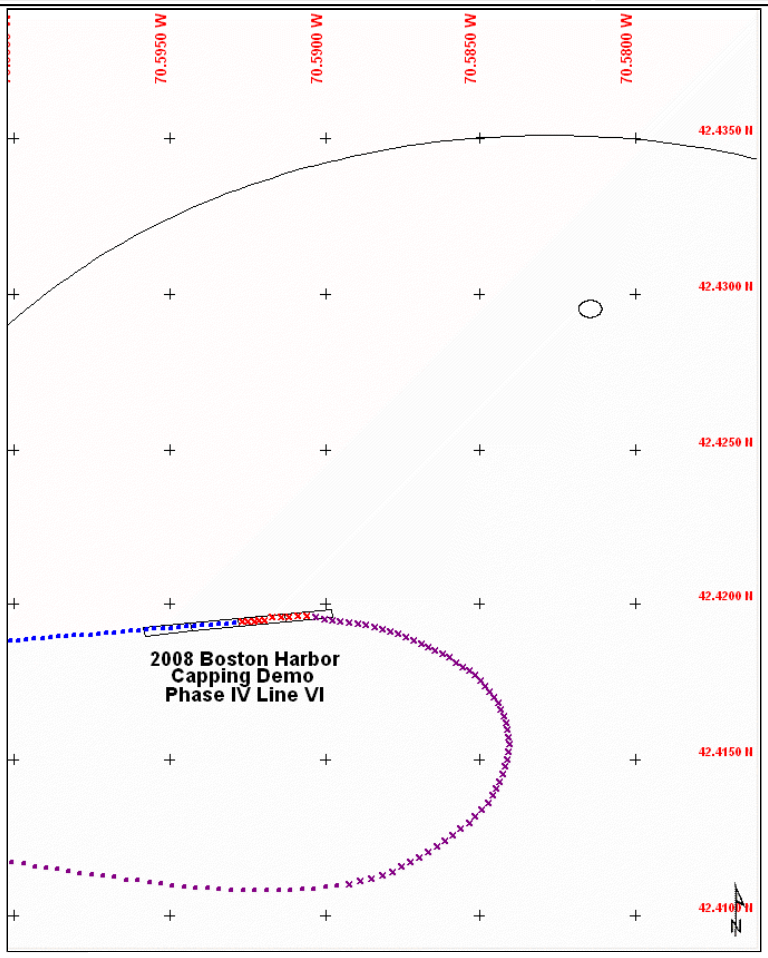
Trip #:	159
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/12/2008 04:45:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/12/2008 08:12:46	**Time:**	8/12/2008 08:13:33
Lat:	42.419431	**Lat:**	42.419601
Long:	-70.592675	**Long:**	-70.590593
Aft Draft:	18.45 ft	**Aft Draft:**	10.04 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/12/2008 4:15:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081308_113108

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W912WJ-07-C-0023

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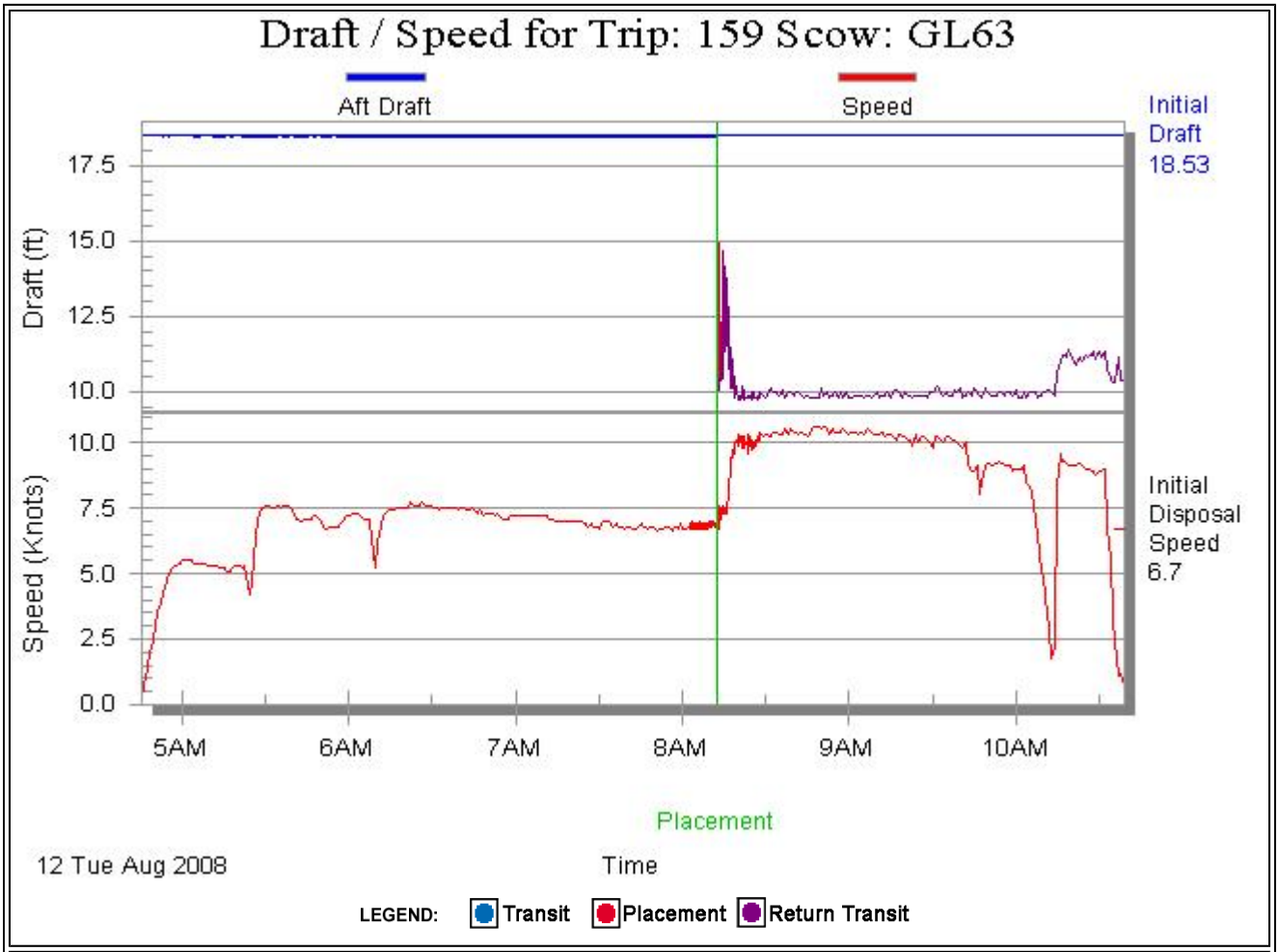


Trip Information

Trip #:	159
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/12/2008 04:45:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/12/2008 08:12:46
Latitude:	42.419431
Longitude:	-70.592675
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/12/2008 08:13:33
Latitude:	42.419601
Longitude:	-70.590593
Aft Draft:	10.04 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081308_113108

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

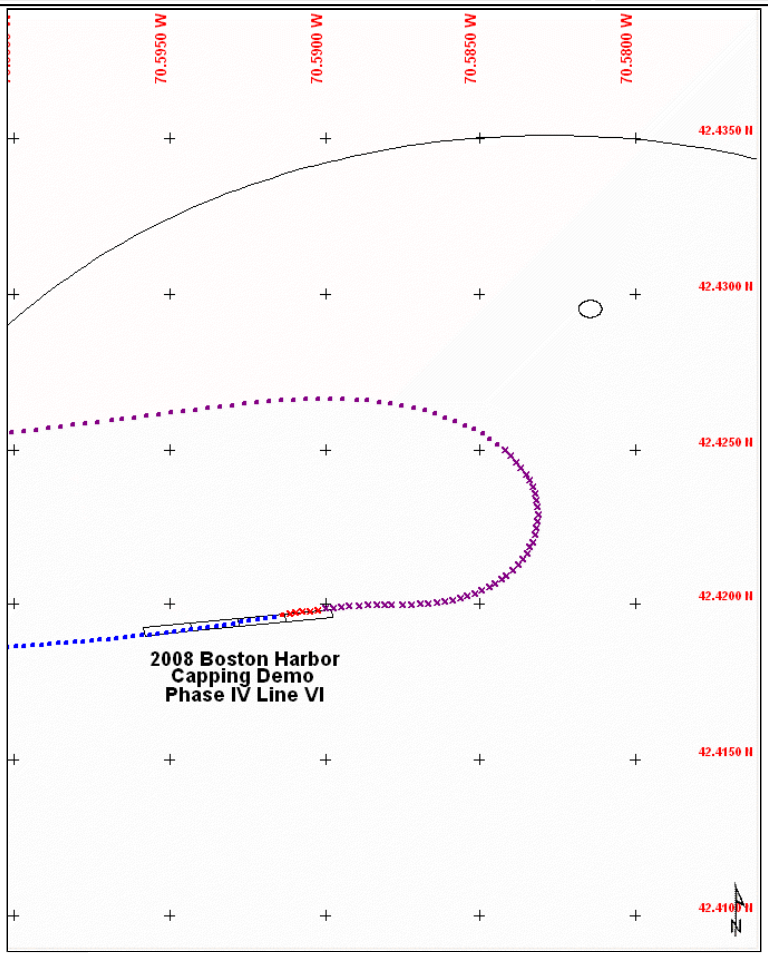
Trip #:	160
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/12/2008 13:34:18
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/12/2008 16:57:02	**Time:**	8/12/2008 16:57:27
Lat:	42.419649	**Lat:**	42.419809
Long:	-70.591388	**Long:**	-70.590255
Aft Draft:	20.40 ft	**Aft Draft:**	6.37 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/12/2008 1:16:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081308_114212

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W912WJ-07-C-0023

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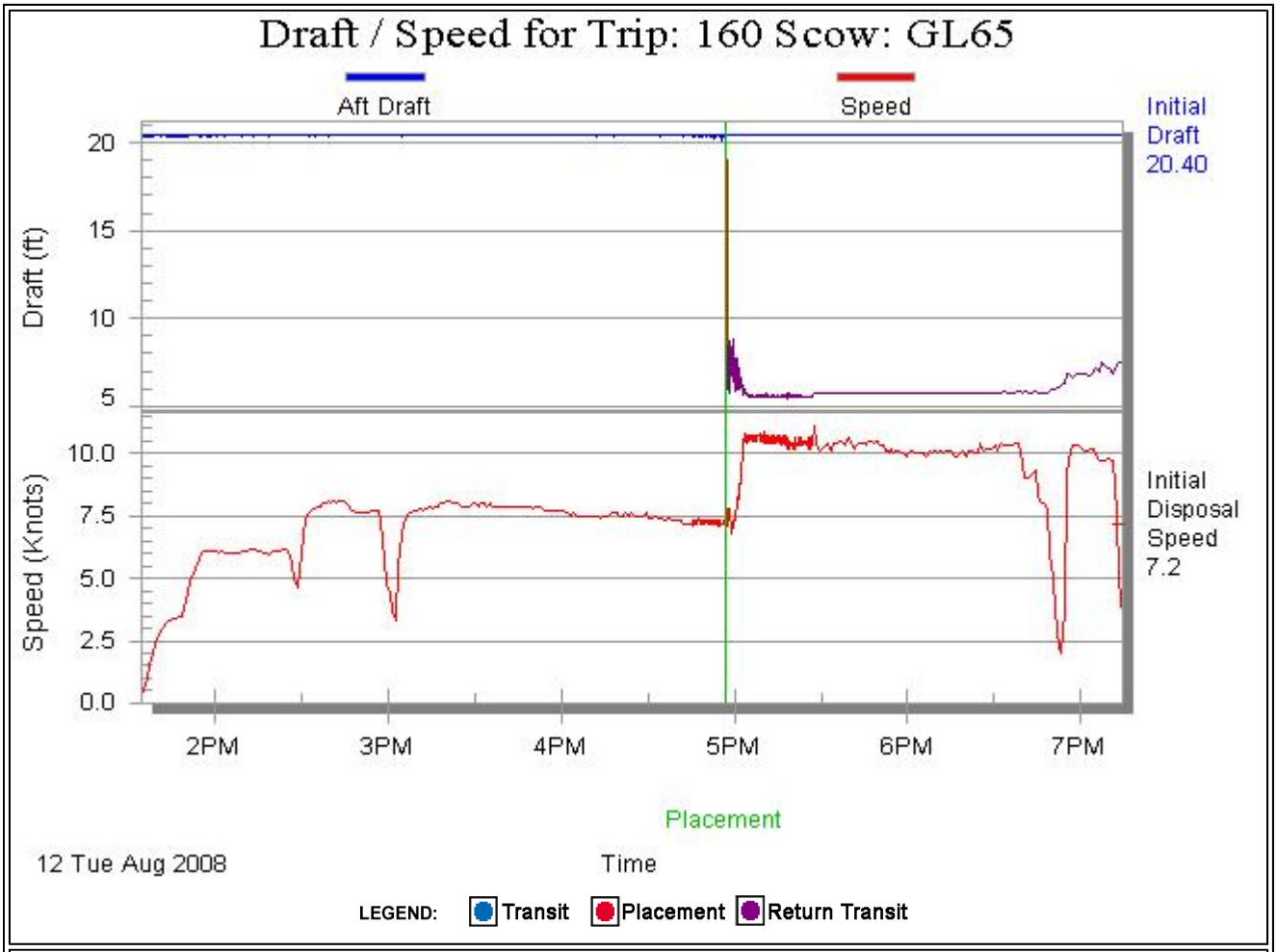


Trip Information

Trip #:	160
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/12/2008 13:34:18
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/12/2008 16:57:02
Latitude:	42.419649
Longitude:	-70.591388
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/12/2008 16:57:27
Latitude:	42.419809
Longitude:	-70.590255
Aft Draft:	6.37 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081308_114212

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

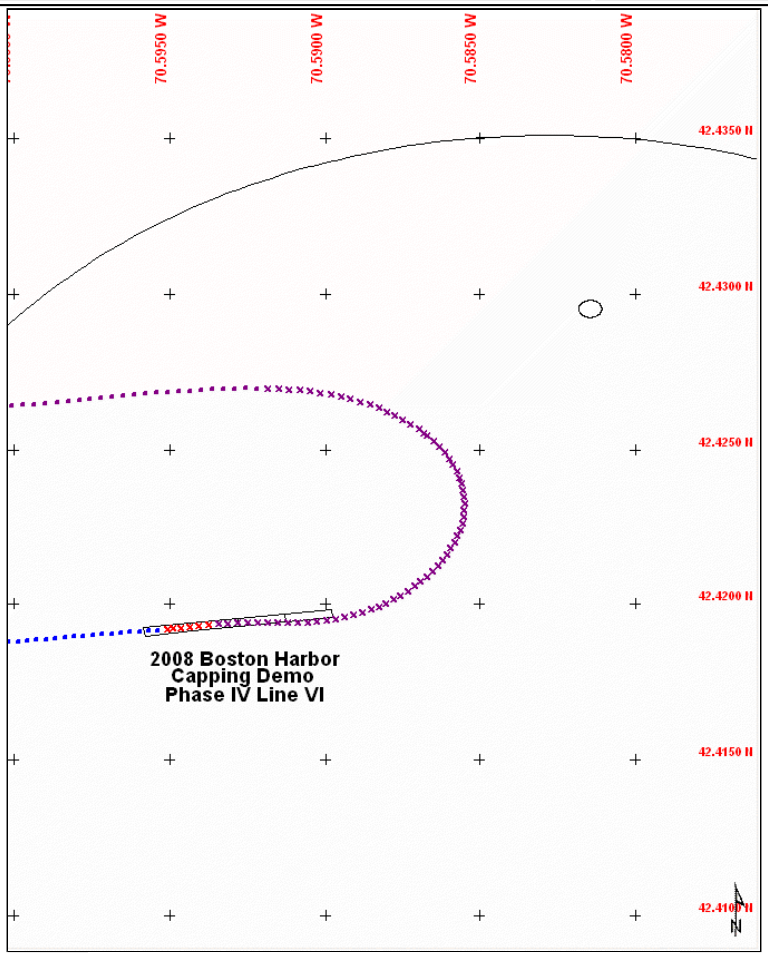
Trip #:	161
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/12/2008 20:54:56
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/12/2008 23:56:40	**Time:**	8/12/2008 23:57:07
Lat:	42.419191	**Lat:**	42.419322
Long:	-70.595084	**Long:**	-70.593748
Aft Draft:	18.53 ft	**Aft Draft:**	10.12 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/12/2008 8:33:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081308_114642

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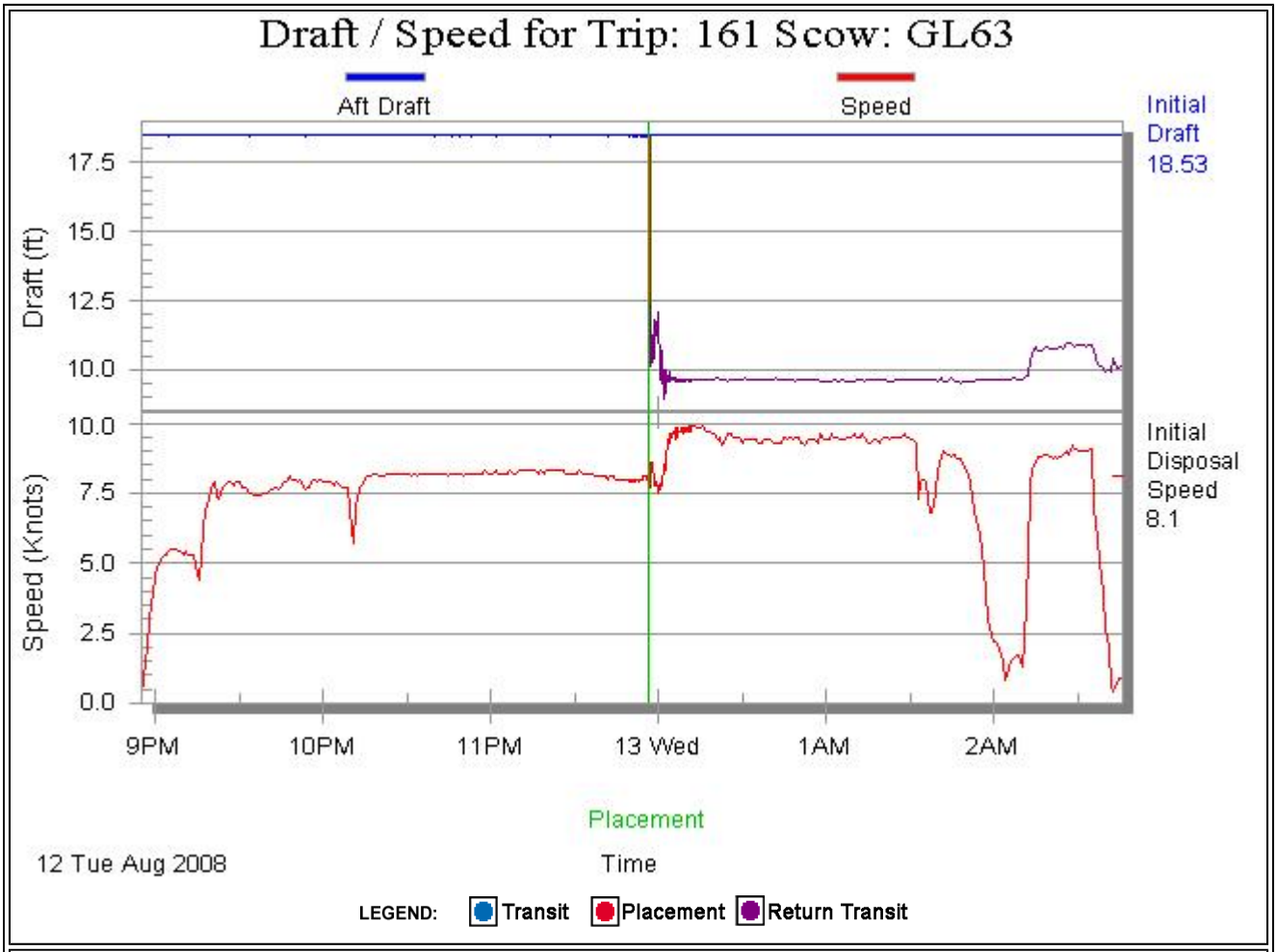


Trip Information

Trip #:	161
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/12/2008 20:54:56
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/12/2008 23:56:40
Latitude:	42.419191
Longitude:	-70.595084
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/12/2008 23:57:07
Latitude:	42.419322
Longitude:	-70.593748
Aft Draft:	10.12 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081308_114642

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	162
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/13/2008 04:26:20
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

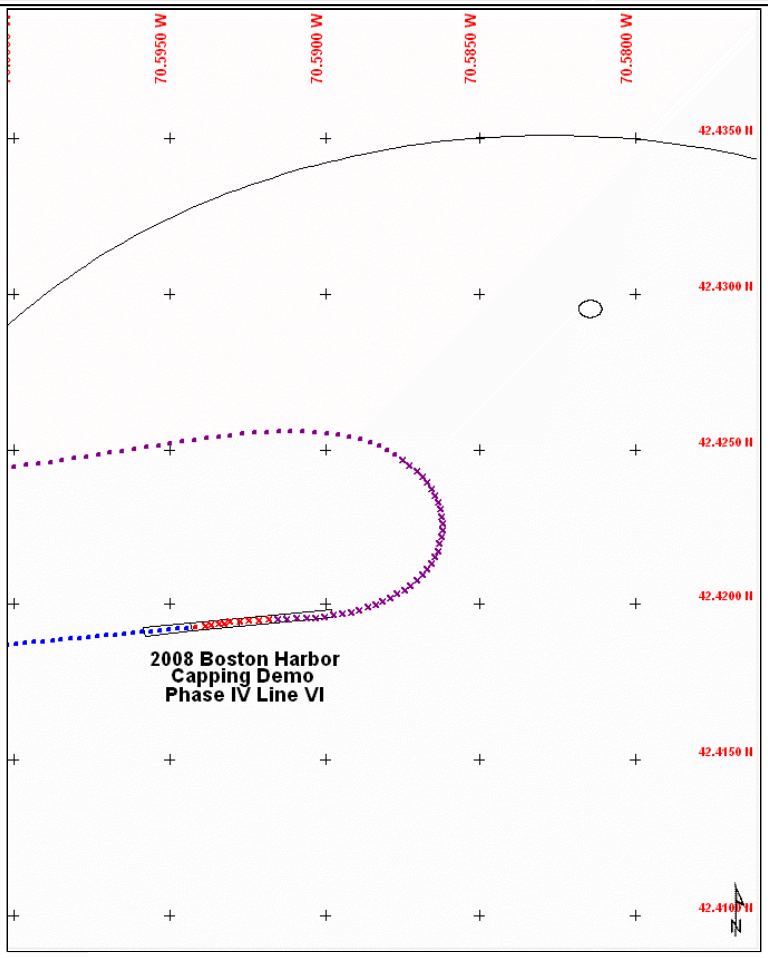
Placement Start:		**Placement End:**	
Time:	8/13/2008 07:40:55	**Time:**	8/13/2008 07:41:42
Lat:	42.419265	**Lat:**	42.419502
Long:	-70.594161	**Long:**	-70.591833
Aft Draft:	20.32 ft	**Aft Draft:**	6.81 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/13/2008 4:04:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081308_115309

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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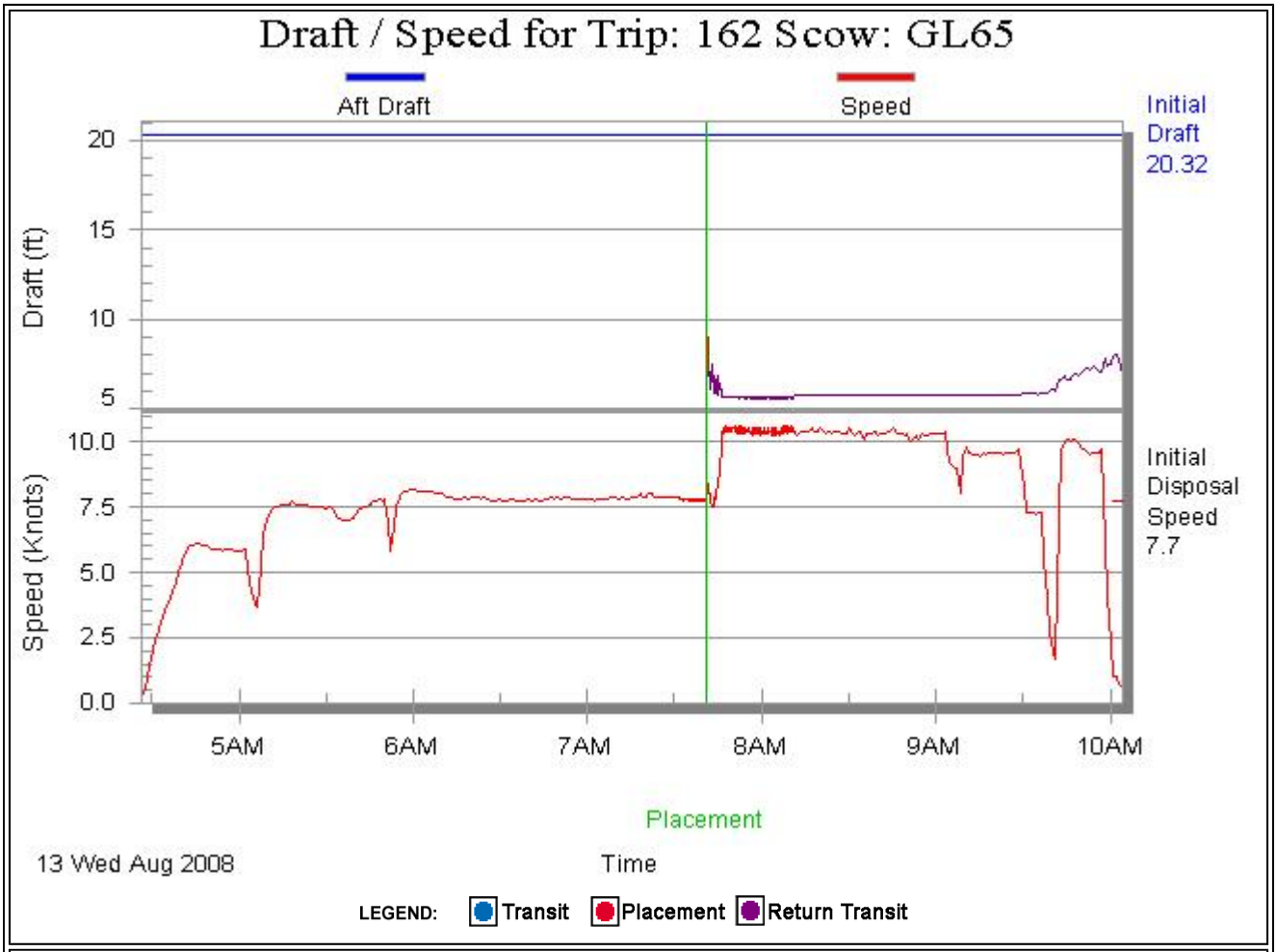


Trip Information

Trip #:	162
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/13/2008 04:26:20
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/13/2008 07:40:55
Latitude:	42.419265
Longitude:	-70.594161
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/13/2008 07:41:42
Latitude:	42.419502
Longitude:	-70.591833
Aft Draft:	6.81 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081308_115309

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

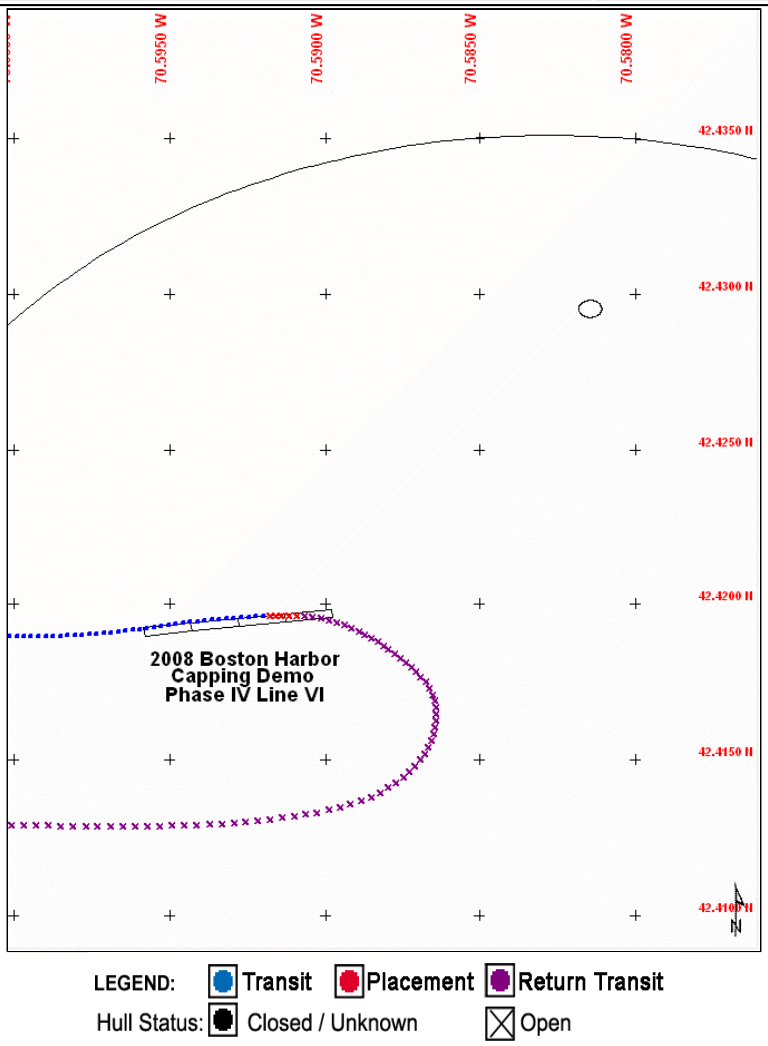
Trip #:	163
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/13/2008 11:57:27
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/13/2008 15:09:40	**Time:**	8/13/2008 15:10:01
Lat:	42.419625	**Lat:**	42.419623
Long:	-70.591769	**Long:**	-70.590918
Aft Draft:	18.61 ft	**Aft Draft:**	12.97 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/13/2008 11:29:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081408_105741

ADISS
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2008 Boston Harbor Maintenance Dredging
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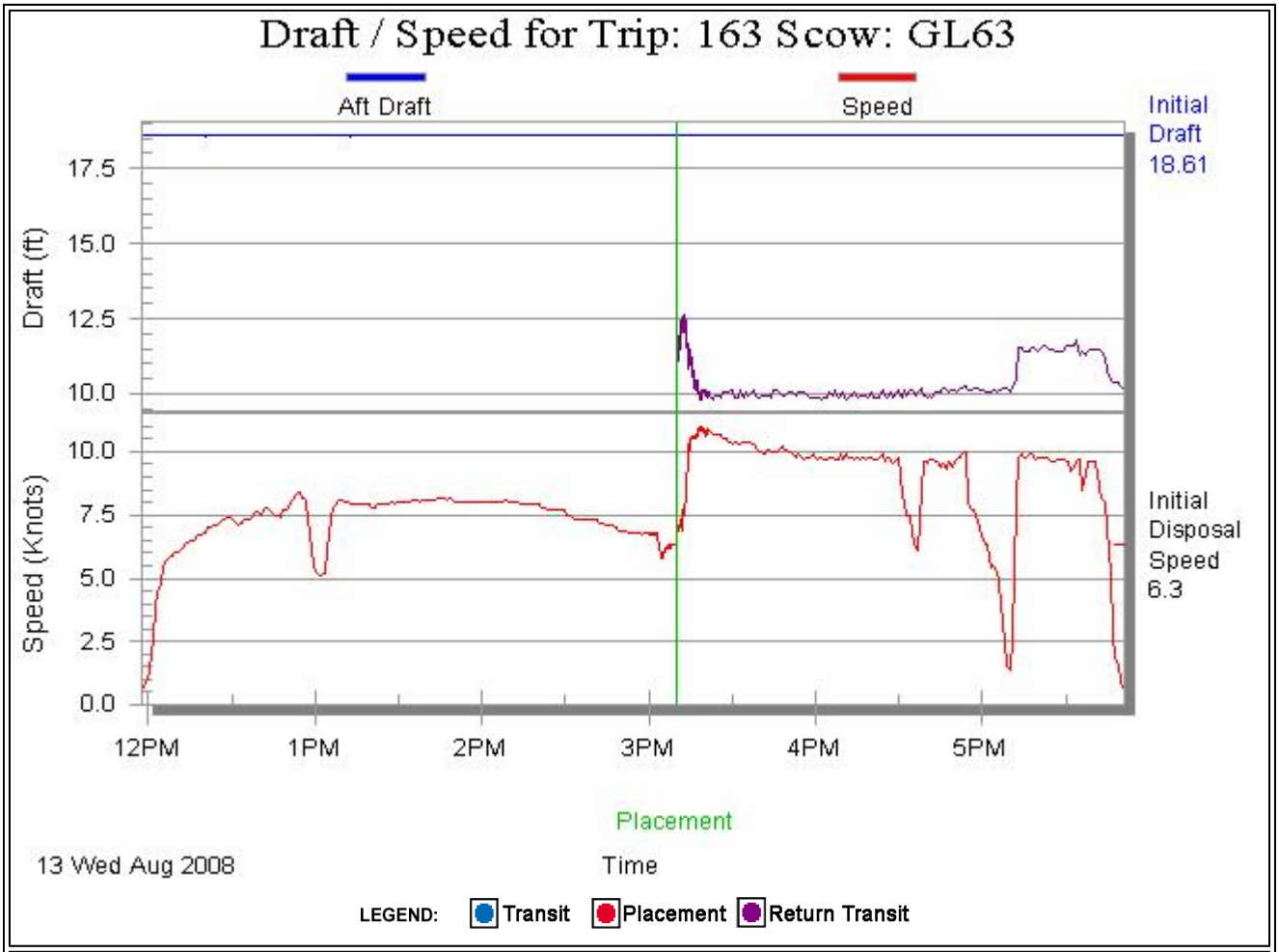


Trip Information

Trip #:	163
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/13/2008 11:57:27
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/13/2008 15:09:40
Latitude:	42.419625
Longitude:	-70.591769
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/13/2008 15:10:01
Latitude:	42.419623
Longitude:	-70.590918
Aft Draft:	12.97 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081408_105741

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

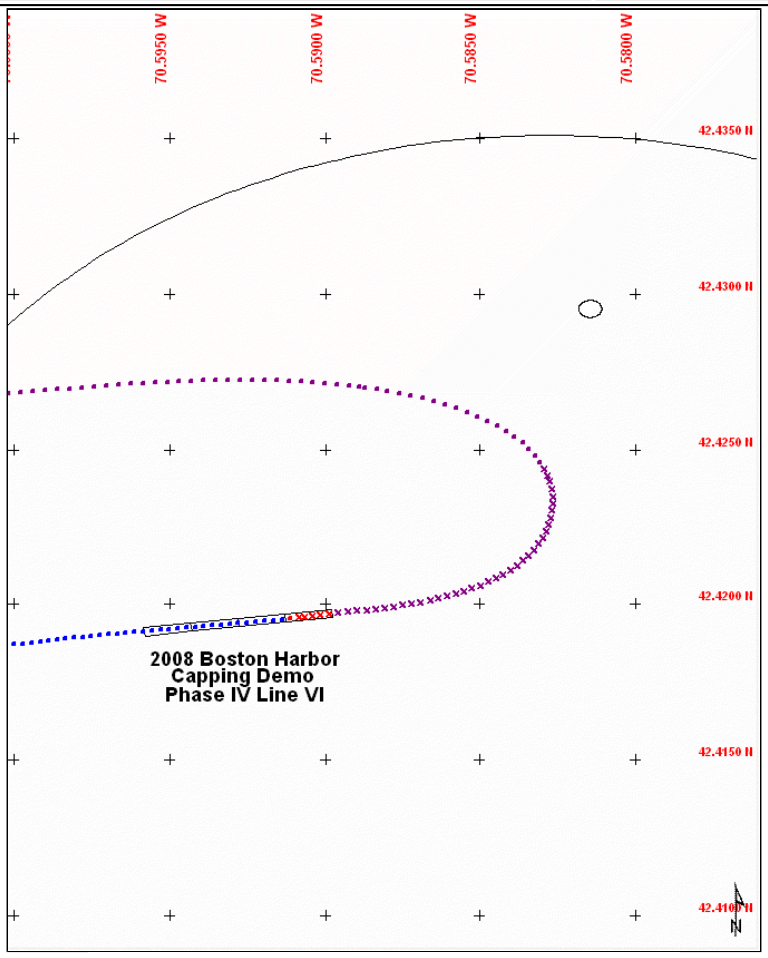
Trip #:	164
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/13/2008 18:08:15
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/13/2008 21:25:43	**Time:**	8/13/2008 21:26:10
Lat:	42.419545	**Lat:**	42.419693
Long:	-70.591124	**Long:**	-70.589871
Aft Draft:	20.40 ft	**Aft Draft:**	6.81 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: N/A (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081408_120457

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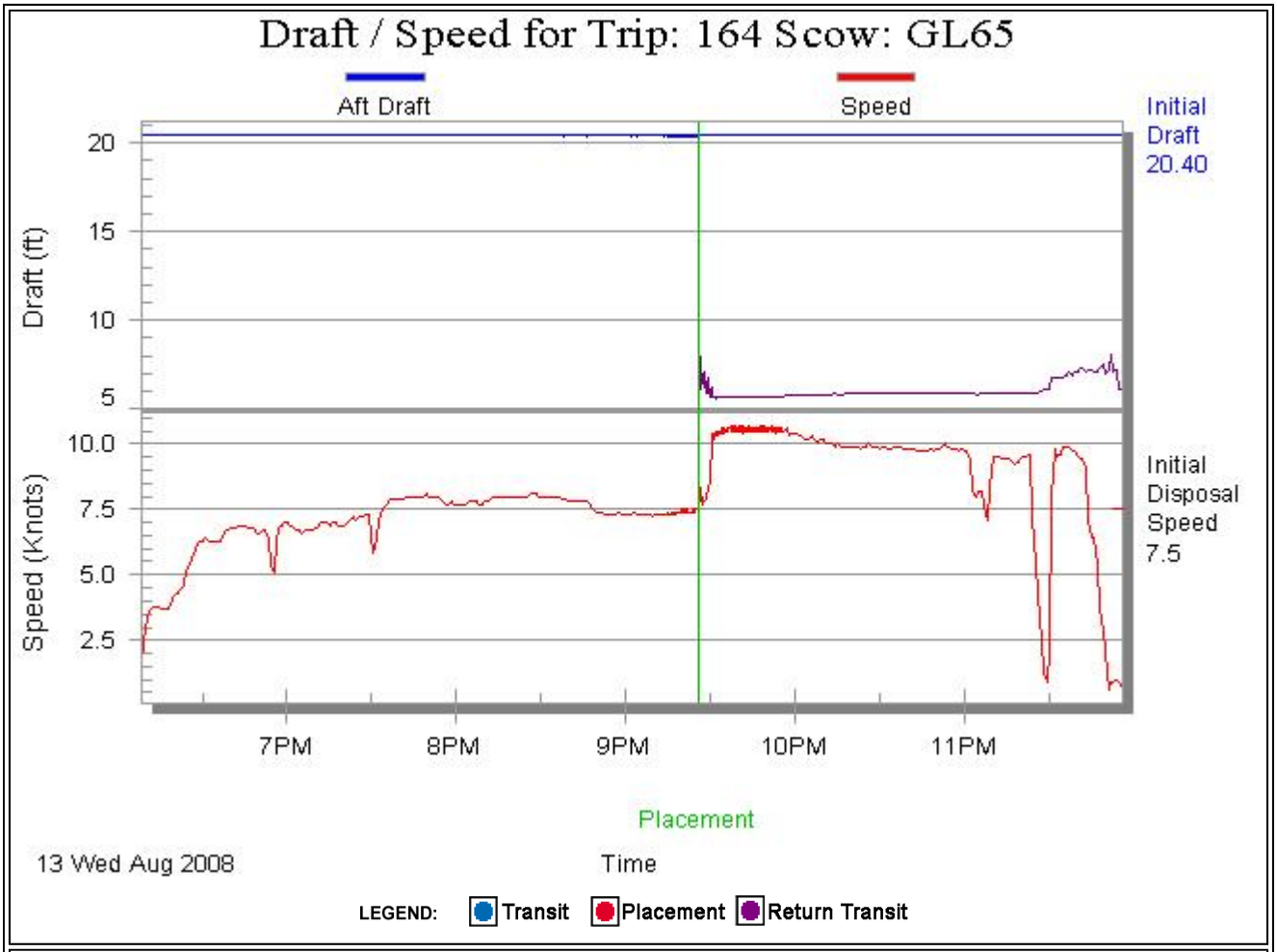


Trip Information

Trip #:	164
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/13/2008 18:08:15
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/13/2008 21:25:43
Latitude:	42.419545
Longitude:	-70.591124
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/13/2008 21:26:10
Latitude:	42.419693
Longitude:	-70.589871
Aft Draft:	6.81 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081408_120457

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

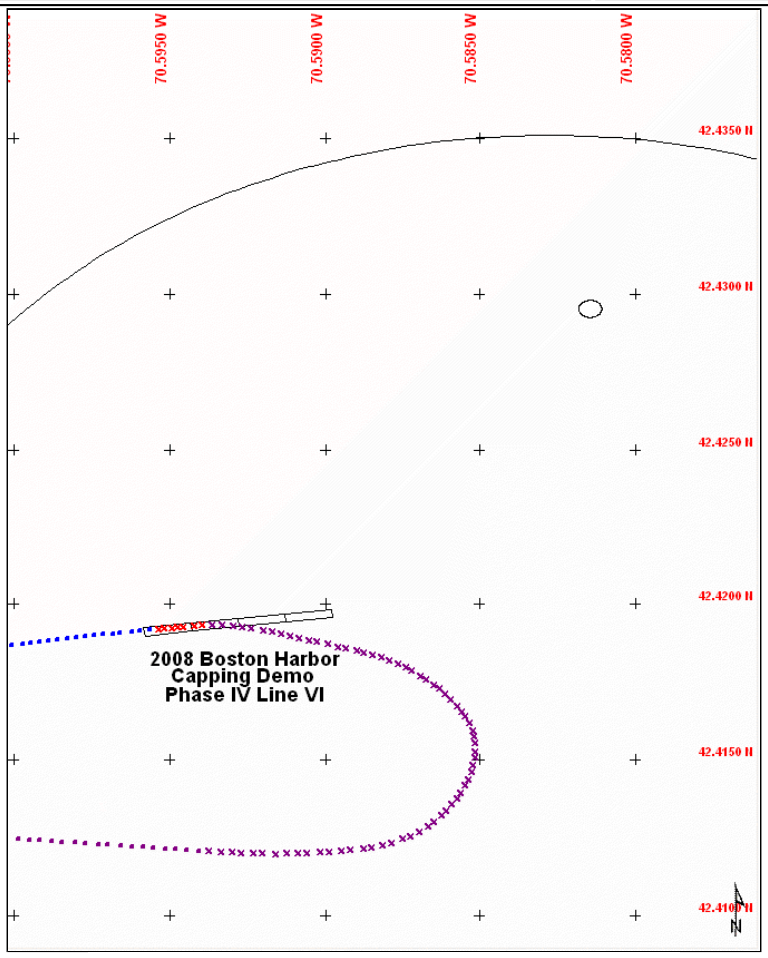
Trip #:	165
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/14/2008 02:08:56
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/14/2008 05:10:27	**Time:**	8/14/2008 05:10:56
Lat:	42.419203	**Lat:**	42.419324
Long:	-70.595374	**Long:**	-70.593947
Aft Draft:	18.45 ft	**Aft Draft:**	12.18 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: N/A (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 081408_120517

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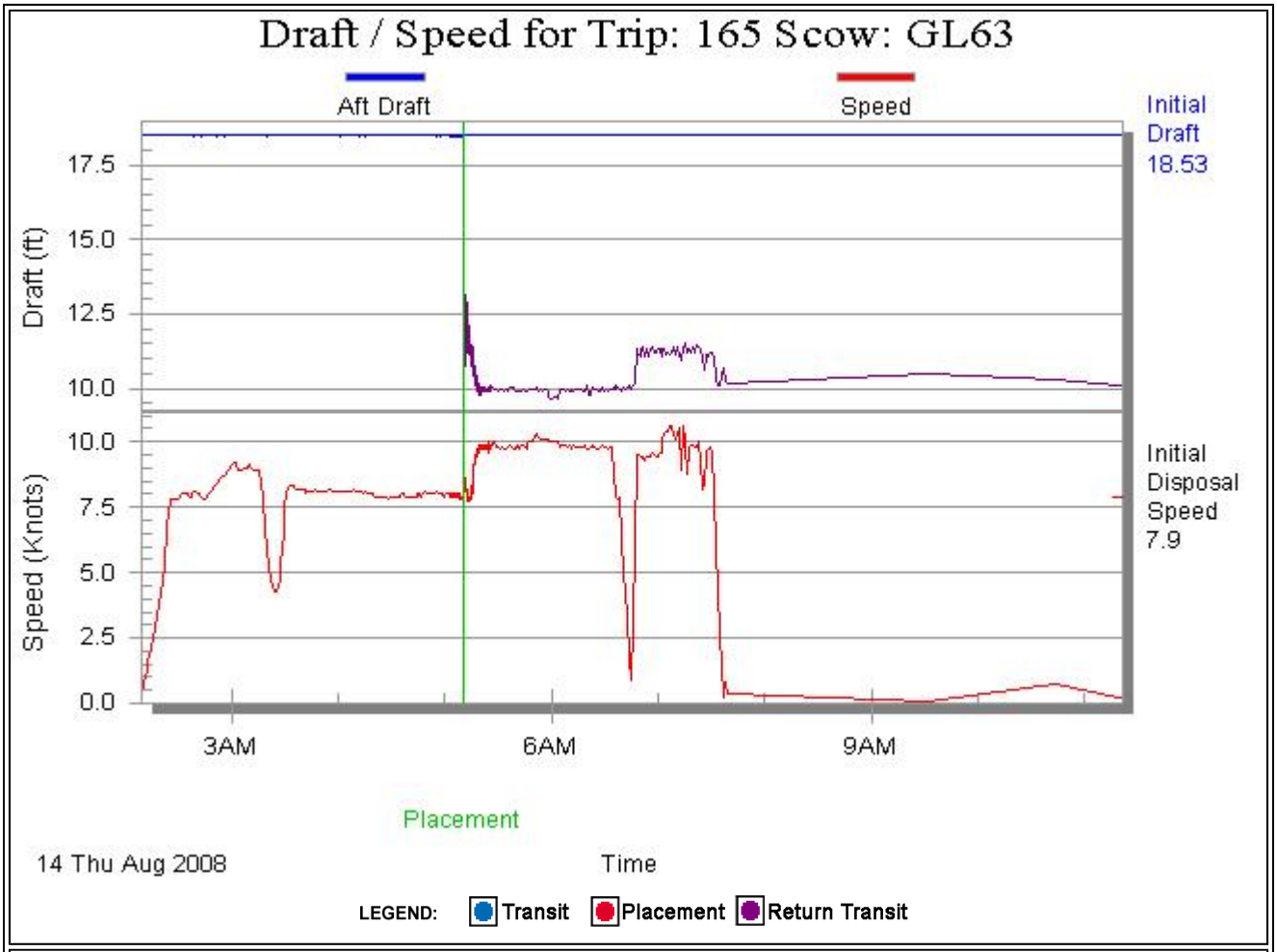

Trip Information

Trip #:	165
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/14/2008 02:08:56
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/14/2008 05:10:27
Latitude:	42.419203
Longitude:	-70.595374
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/14/2008 05:10:56
Latitude:	42.419324
Longitude:	-70.593947
Aft Draft:	12.18 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081408_120517

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

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Trip Information:

Trip #:	166
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/14/2008 17:44:05
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

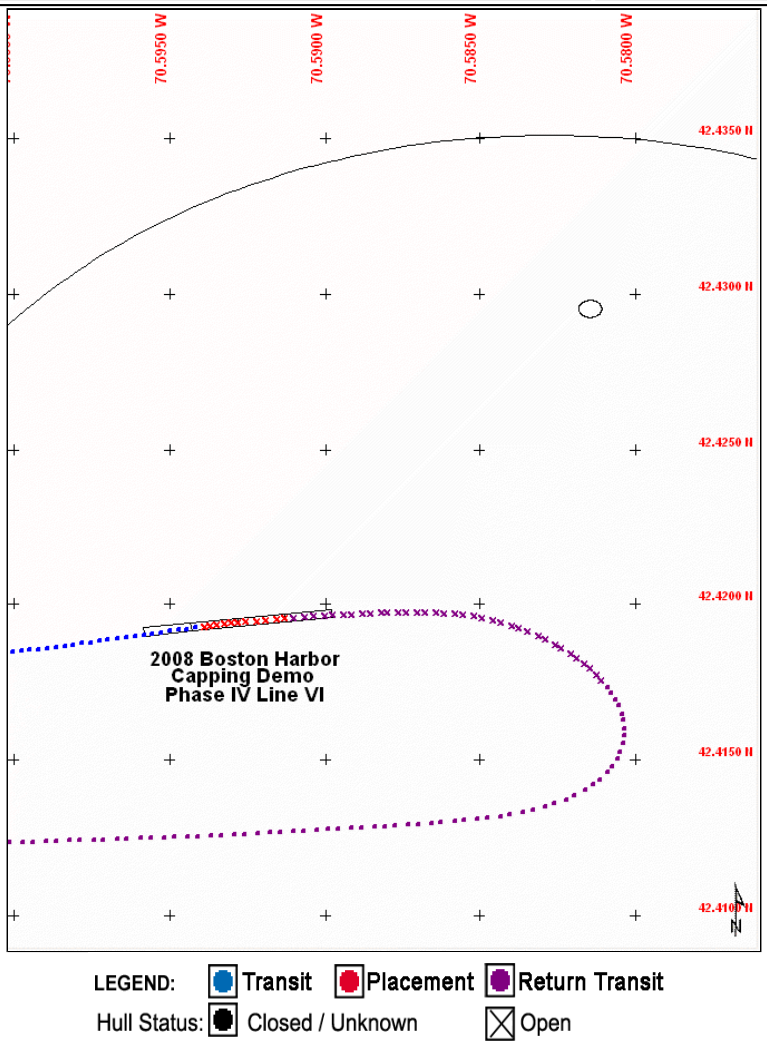
Placement Start:		**Placement End:**	
Time:	8/14/2008 21:10:01	**Time:**	8/14/2008 21:10:53
Lat:	42.419279	**Lat:**	42.419529
Long:	-70.593892	**Long:**	-70.591329
Aft Draft:	20.25 ft	**Aft Draft:**	6.22 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/14/2008 5:12:00 PM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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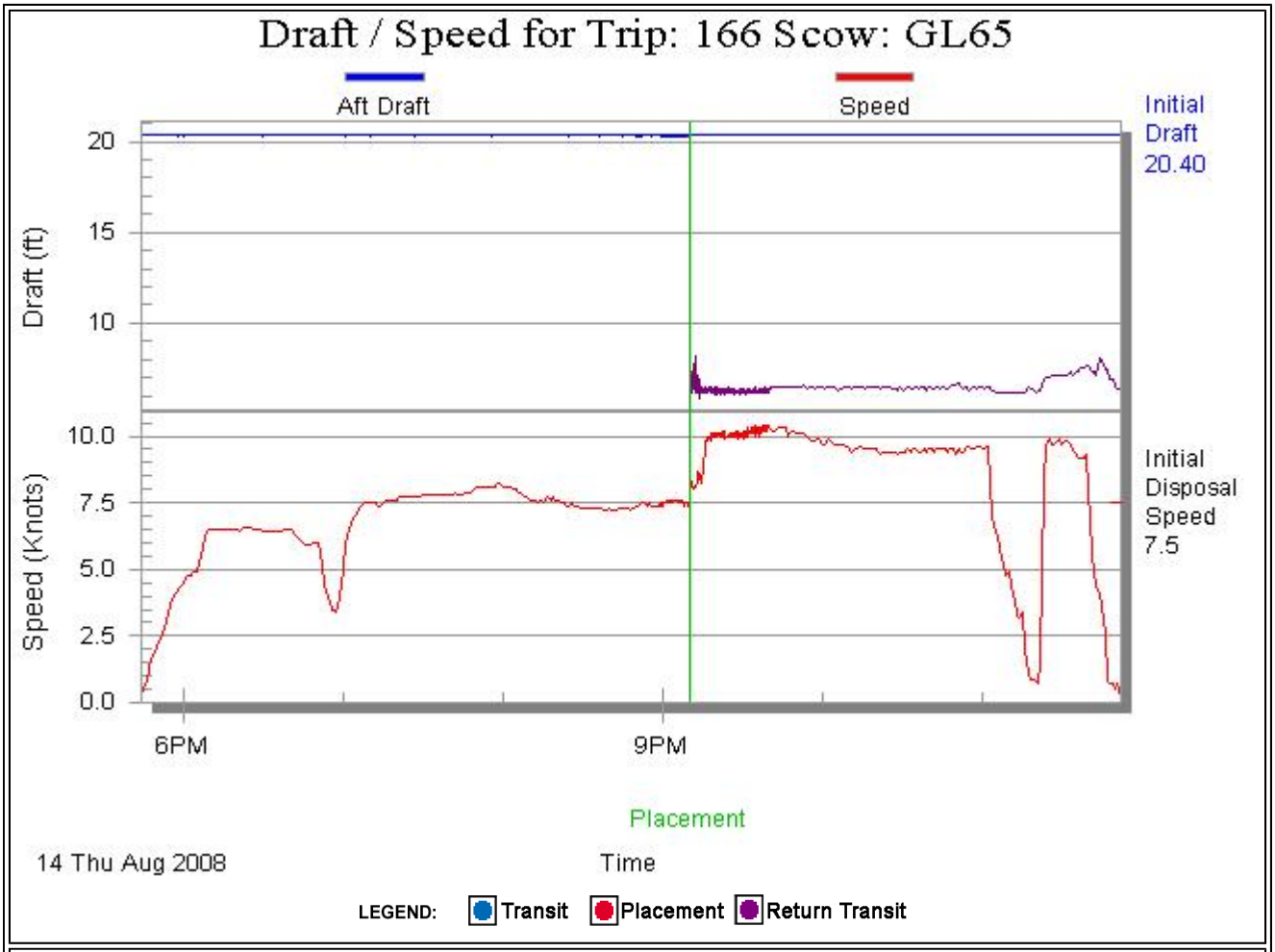

Trip Information

Trip #:	166
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/14/2008 17:44:05
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/14/2008 21:10:01
Latitude:	42.419279
Longitude:	-70.593892
Aft Draft:	20.25 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/14/2008 21:10:53
Latitude:	42.419529
Longitude:	-70.591329
Aft Draft:	6.22 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081508_113530

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

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Trip Information:

Trip #:	167
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/15/2008 01:39:25
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

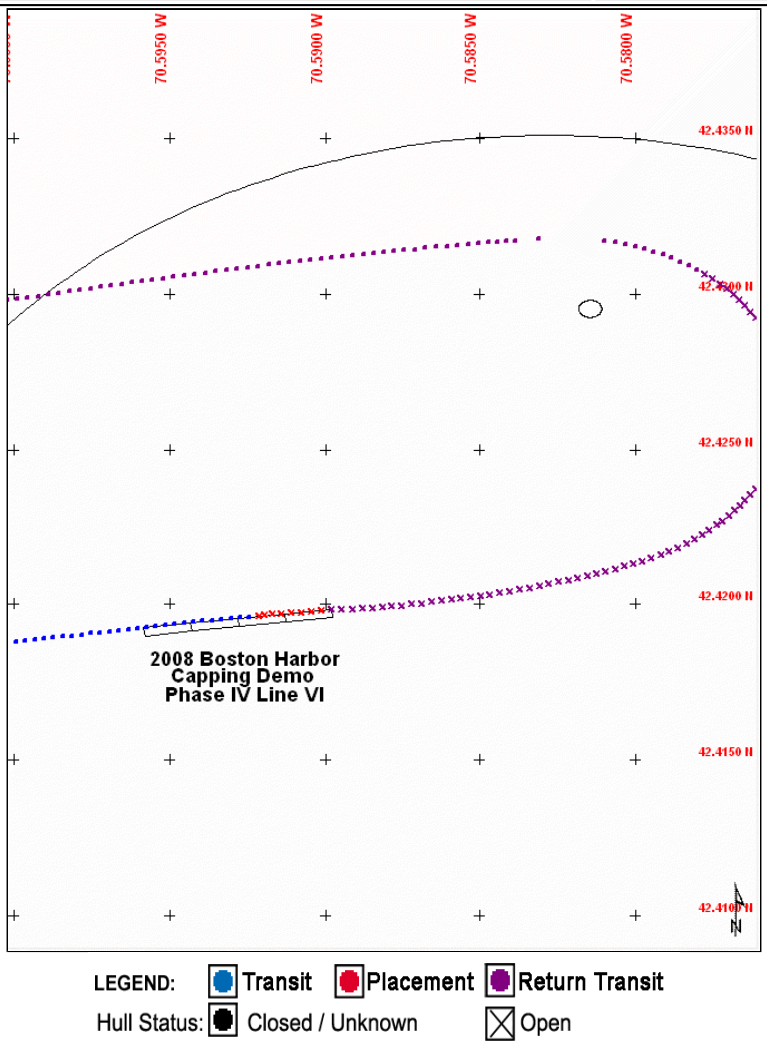
	Placement Start:	Placement End:
Time:	8/15/2008 05:31:33	8/15/2008 05:32:12
Lat:	42.419621	42.419799
Long:	-70.592141	-70.590132
Aft Draft:	18.53 ft	10.51 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/15/2008 4:12:00 AM (Local)

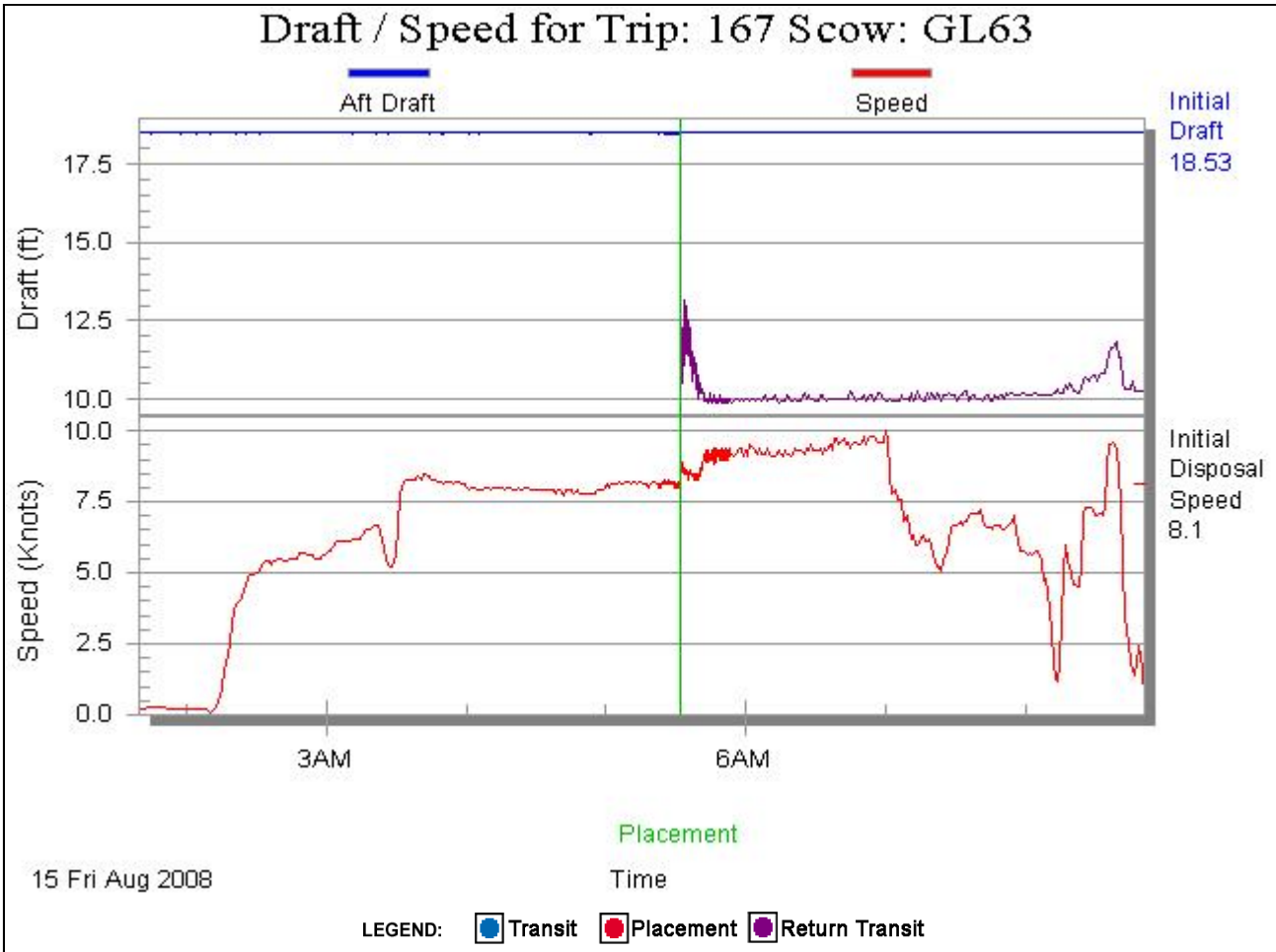
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	167
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/15/2008 01:39:25
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/15/2008 05:31:33	**Time:**	8/15/2008 05:32:12
Latitude:	42.419621	**Latitude:**	42.419799
Longitude:	-70.592141	**Longitude:**	-70.590132
Aft Draft:	18.53 ft	**Aft Draft:**	10.51 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081508_113946

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

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Trip Information:

Trip #:	168
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/15/2008 11:39:36
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

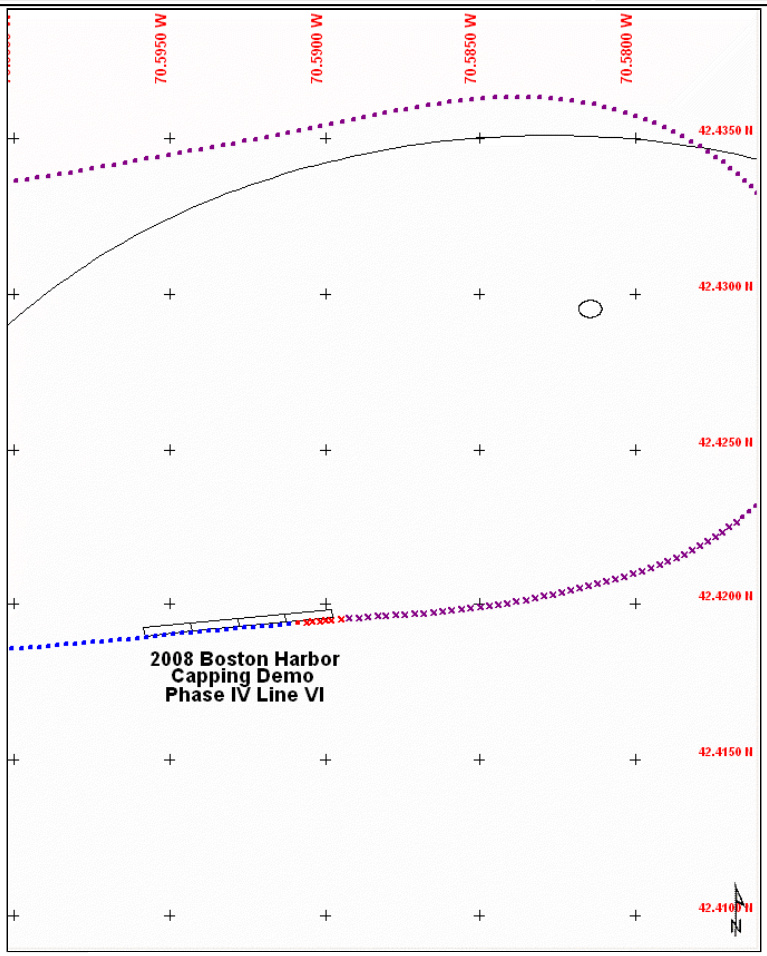
Placement Start:		**Placement End:**	
Time:	8/15/2008 15:23:06	**Time:**	8/15/2008 15:23:35
Lat:	42.419389	**Lat:**	42.419510
Long:	-70.590892	**Long:**	-70.589511
Aft Draft:	20.40 ft	**Aft Draft:**	8.36 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/15/2008 3:32:00 PM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



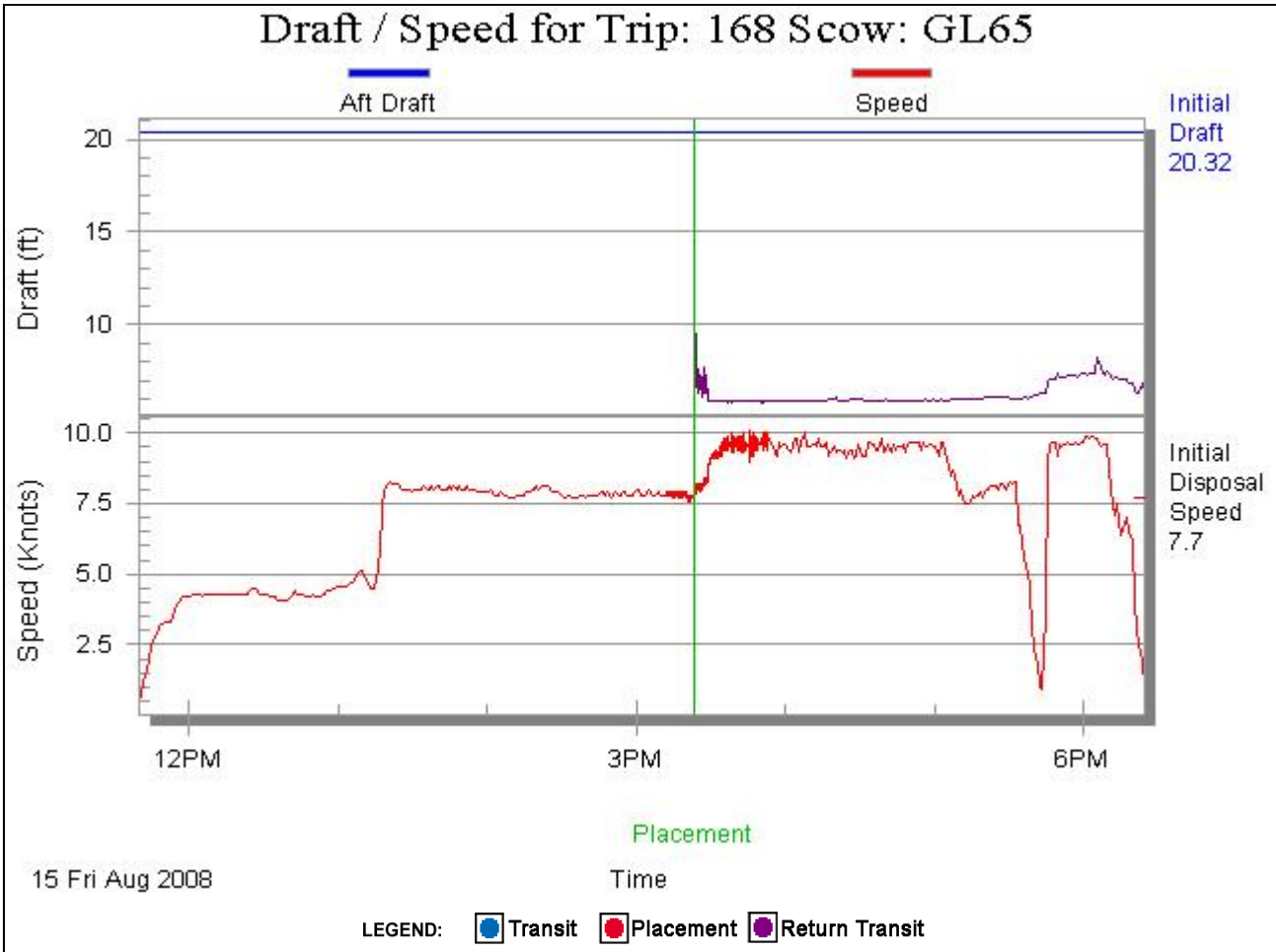


LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	168
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/15/2008 11:39:36
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/15/2008 15:23:06
Latitude:	42.419389
Longitude:	-70.590892
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/15/2008 15:23:35
Latitude:	42.419510
Longitude:	-70.589511
Aft Draft:	8.36 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163435

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	169
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/15/2008 18:49:57
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

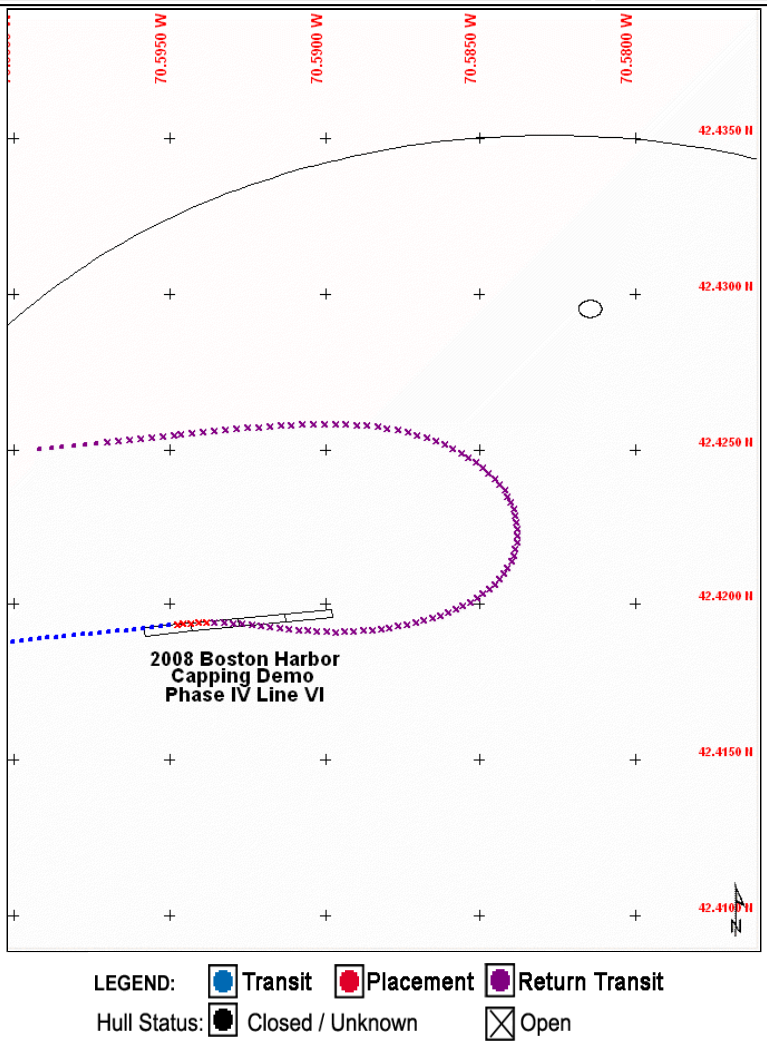
Placement Start:		**Placement End:**	
Time:	8/15/2008 22:02:21	**Time:**	8/15/2008 22:02:41
Lat:	42.419335	**Lat:**	42.419391
Long:	-70.594749	**Long:**	-70.593811
Aft Draft:	18.45 ft	**Aft Draft:**	13.21 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/15/2008 7:00:00 PM (Local)

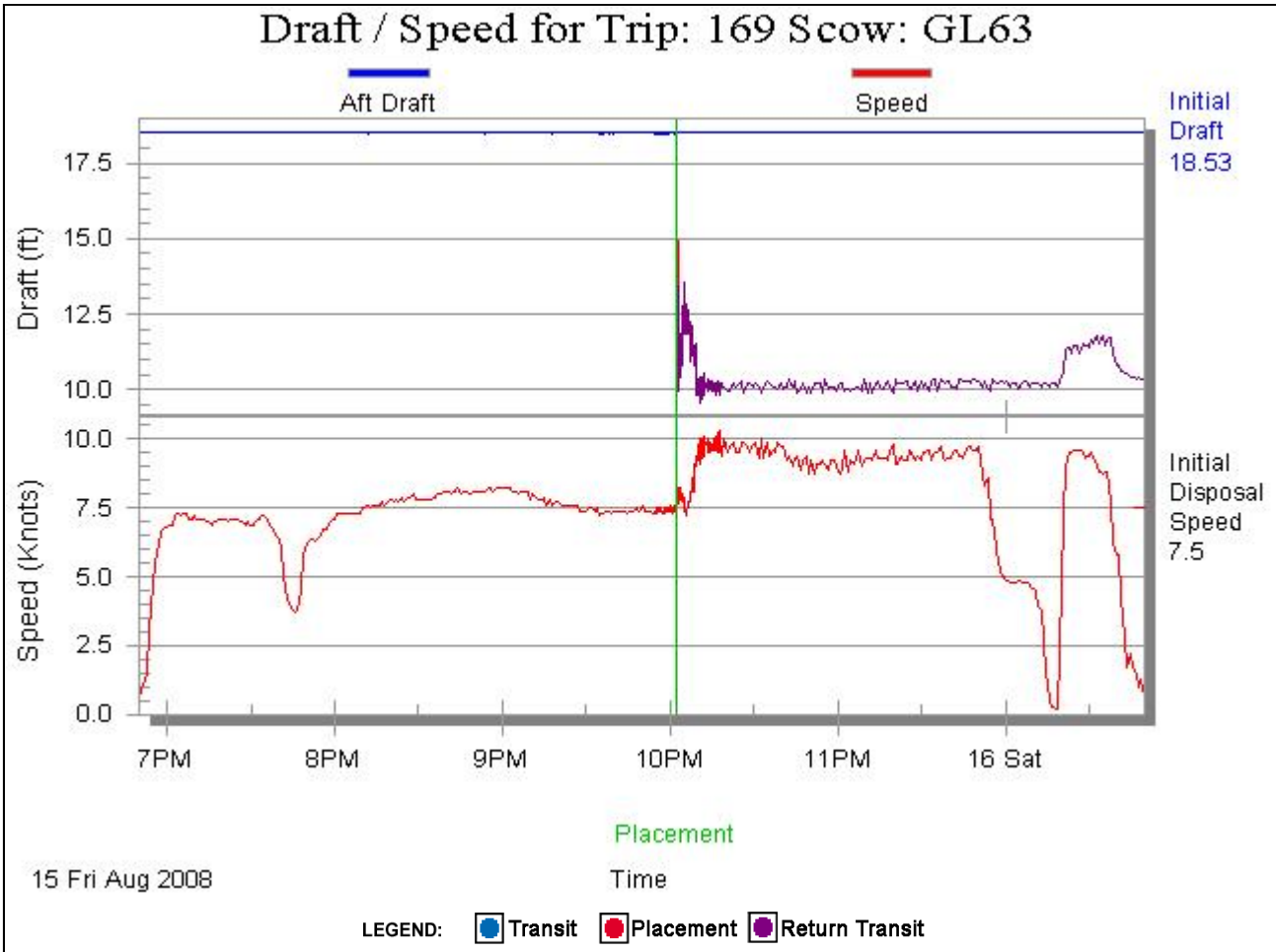
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	169
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/15/2008 18:49:57
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/15/2008 22:02:21	**Time:**	8/15/2008 22:02:41
Latitude:	42.419335	**Latitude:**	42.419391
Longitude:	-70.594749	**Longitude:**	-70.593811
Aft Draft:	18.45 ft	**Aft Draft:**	13.21 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163450

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	170
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/16/2008 02:55:22
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

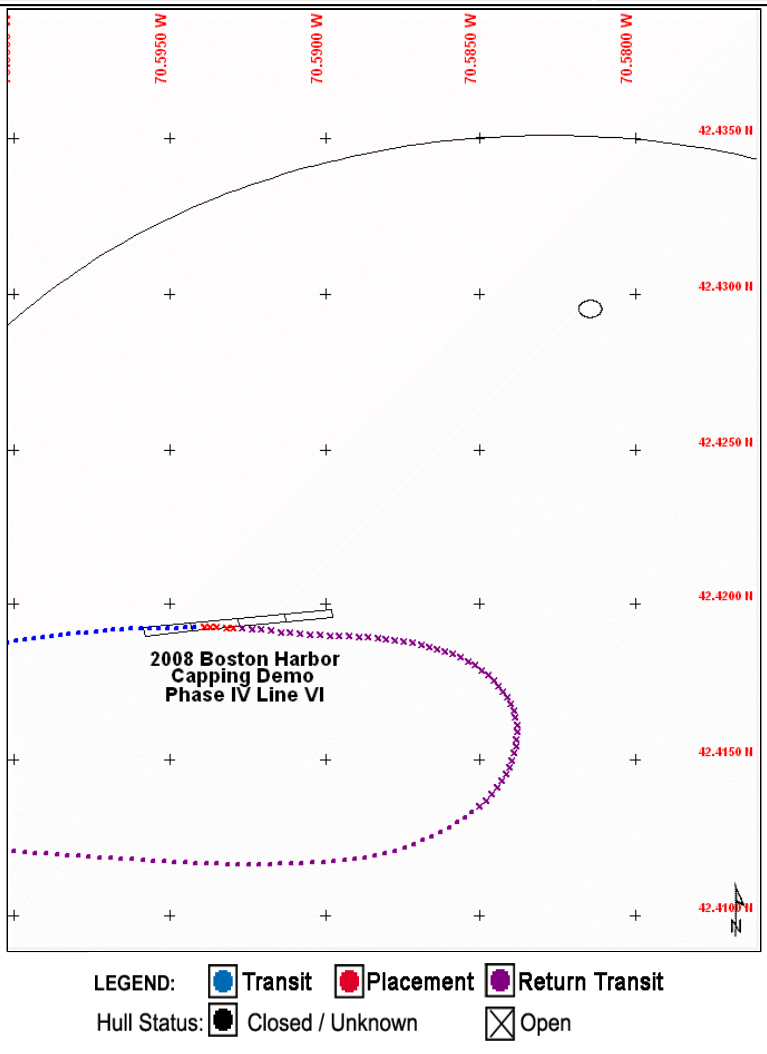
Placement Start:		**Placement End:**	
Time:	8/16/2008 06:18:36	**Time:**	8/16/2008 06:18:55
Lat:	42.419248	**Lat:**	42.419233
Long:	-70.593908	**Long:**	-70.592978
Aft Draft:	20.32 ft	**Aft Draft:**	7.99 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/16/2008 2:15:00 AM (Local)

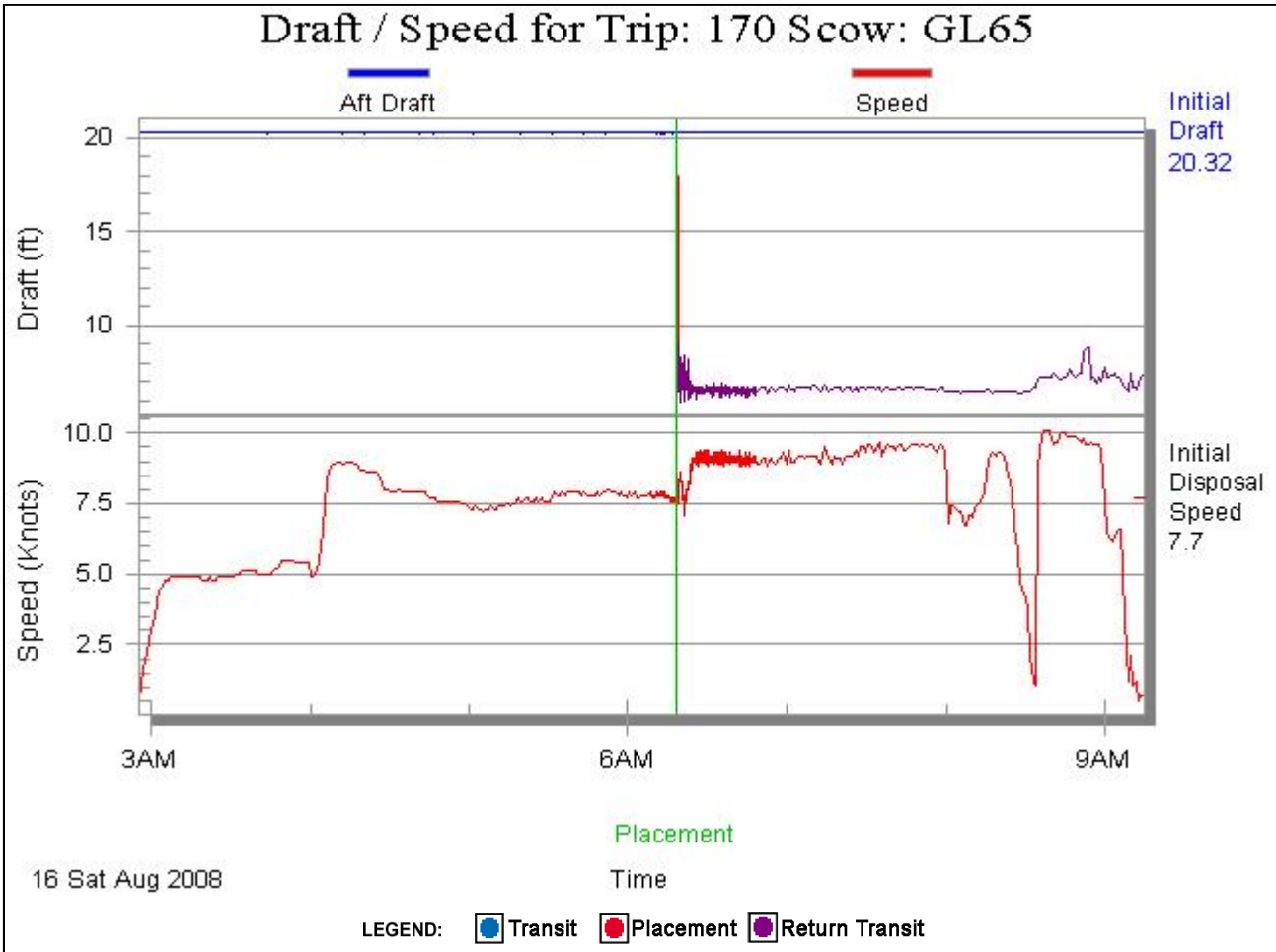
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	170
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/16/2008 02:55:22
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/16/2008 06:18:36
Latitude:	42.419248
Longitude:	-70.593908
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/16/2008 06:18:55
Latitude:	42.419233
Longitude:	-70.592978
Aft Draft:	7.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163549

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	171
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/16/2008 09:37:35
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

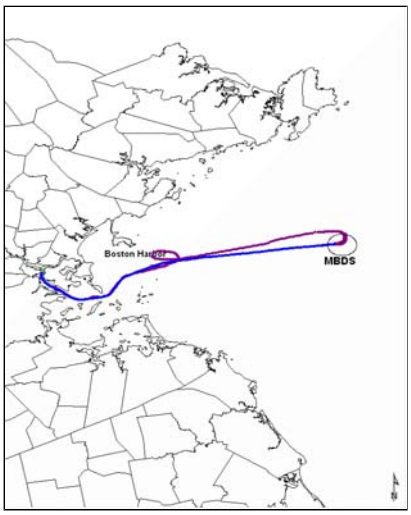
Placement Information:

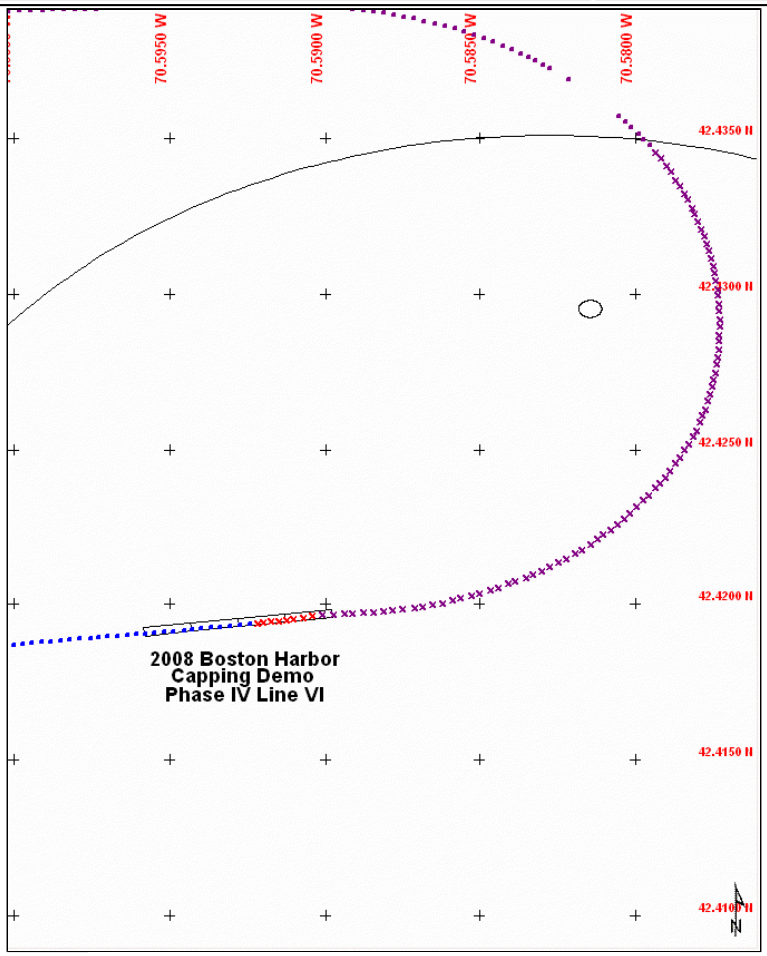
Placement Start:		**Placement End:**	
Time:	8/16/2008 12:48:32	**Time:**	8/16/2008 12:49:07
Lat:	42.419386	**Lat:**	42.419605
Long:	-70.592184	**Long:**	-70.590412
Aft Draft:	18.61 ft	**Aft Draft:**	10.91 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/16/2008 9:16:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



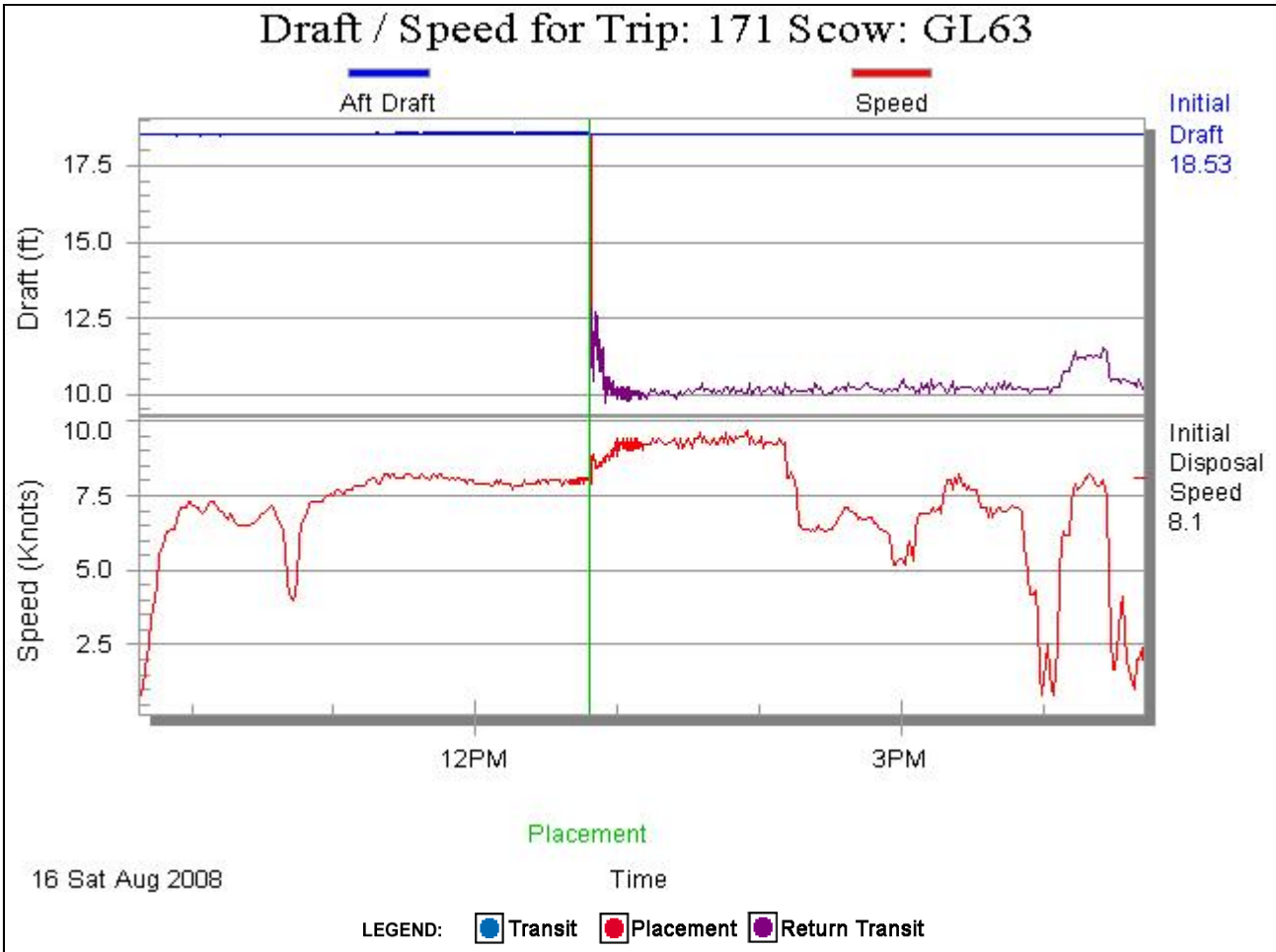


LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	171
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/16/2008 09:37:35
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/16/2008 12:48:32
Latitude:	42.419386
Longitude:	-70.592184
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/16/2008 12:49:07
Latitude:	42.419605
Longitude:	-70.590412
Aft Draft:	10.91 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163614

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	172
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/16/2008 20:48:46
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

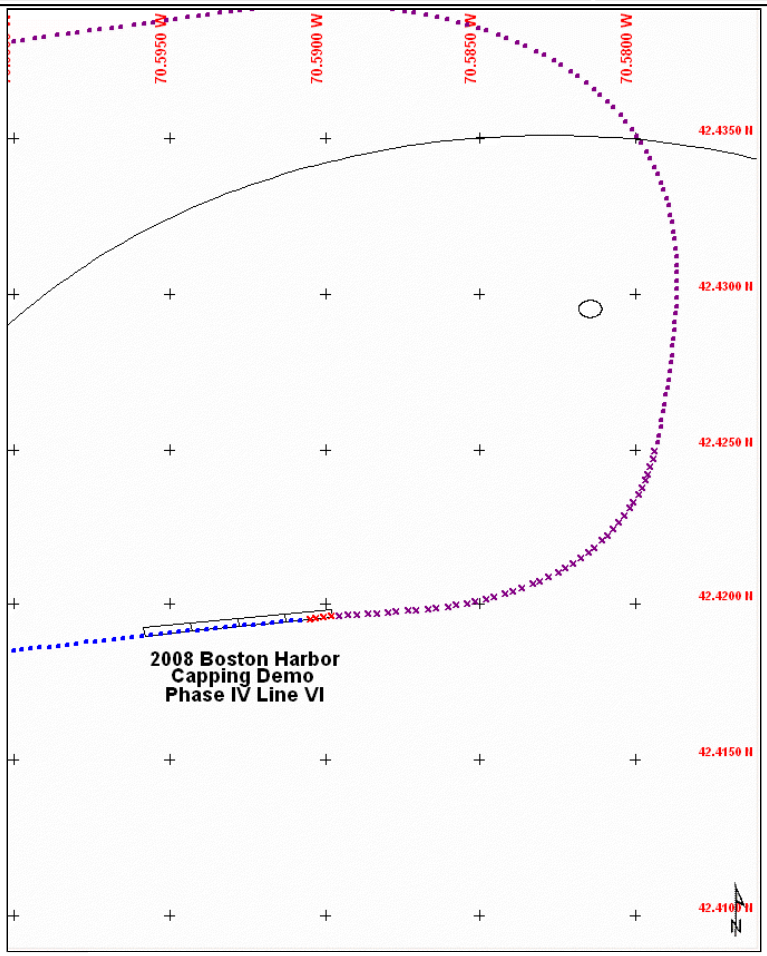
Placement Start:		**Placement End:**	
Time:	8/17/2008 00:06:59	**Time:**	8/17/2008 00:07:13
Lat:	42.419524	**Lat:**	42.419605
Long:	-70.590510	**Long:**	-70.589804
Aft Draft:	20.32 ft	**Aft Draft:**	10.14 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/16/2008 8:13:00 PM (Local)

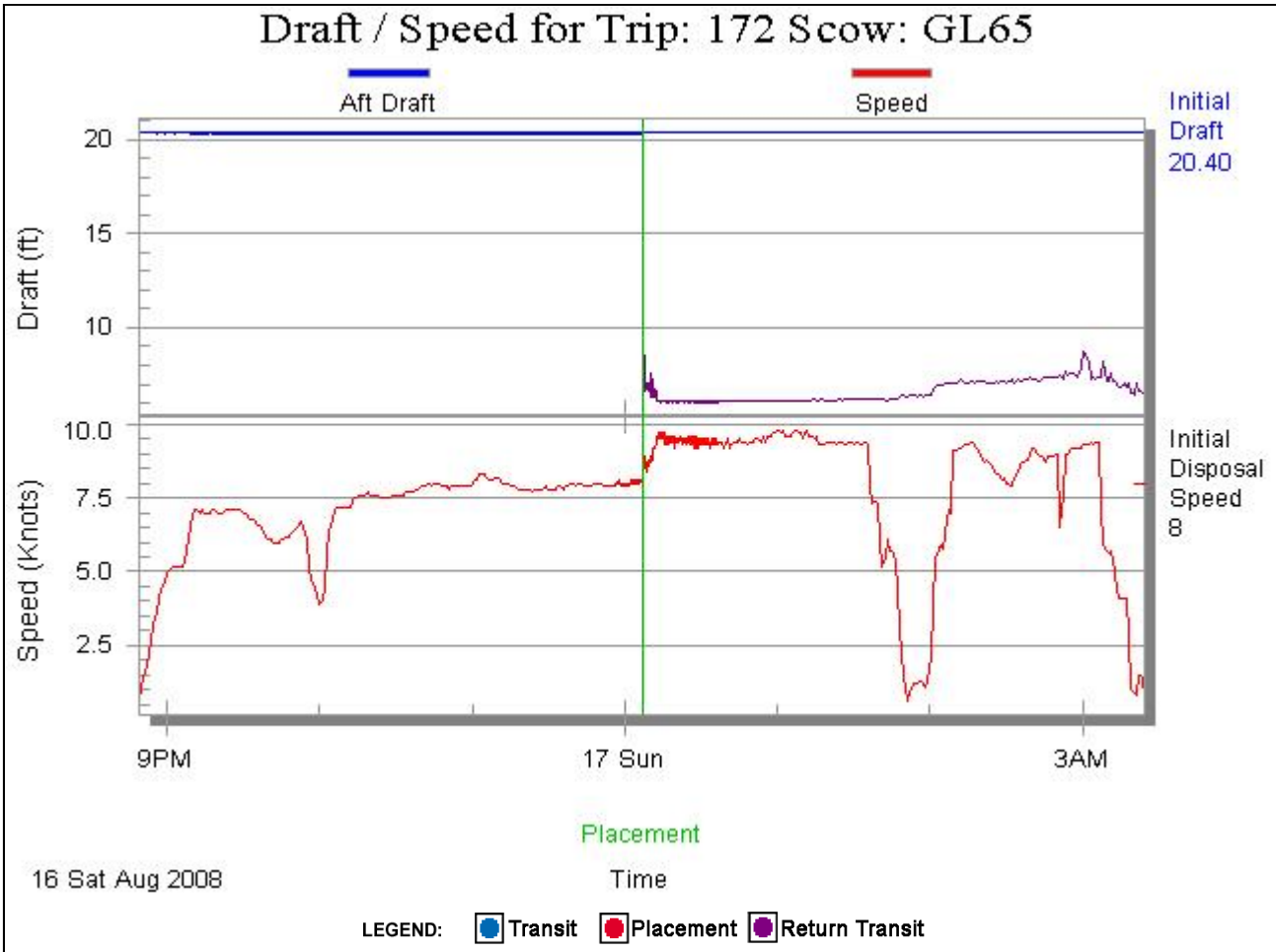
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	172
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/16/2008 20:48:46
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	8/17/2008 00:06:59	**Time:**	8/17/2008 00:07:13
Latitude:	42.419524	**Latitude:**	42.419605
Longitude:	-70.590510	**Longitude:**	-70.589804
Aft Draft:	20.32 ft	**Aft Draft:**	10.14 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163631

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	173
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/17/2008 03:52:47
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

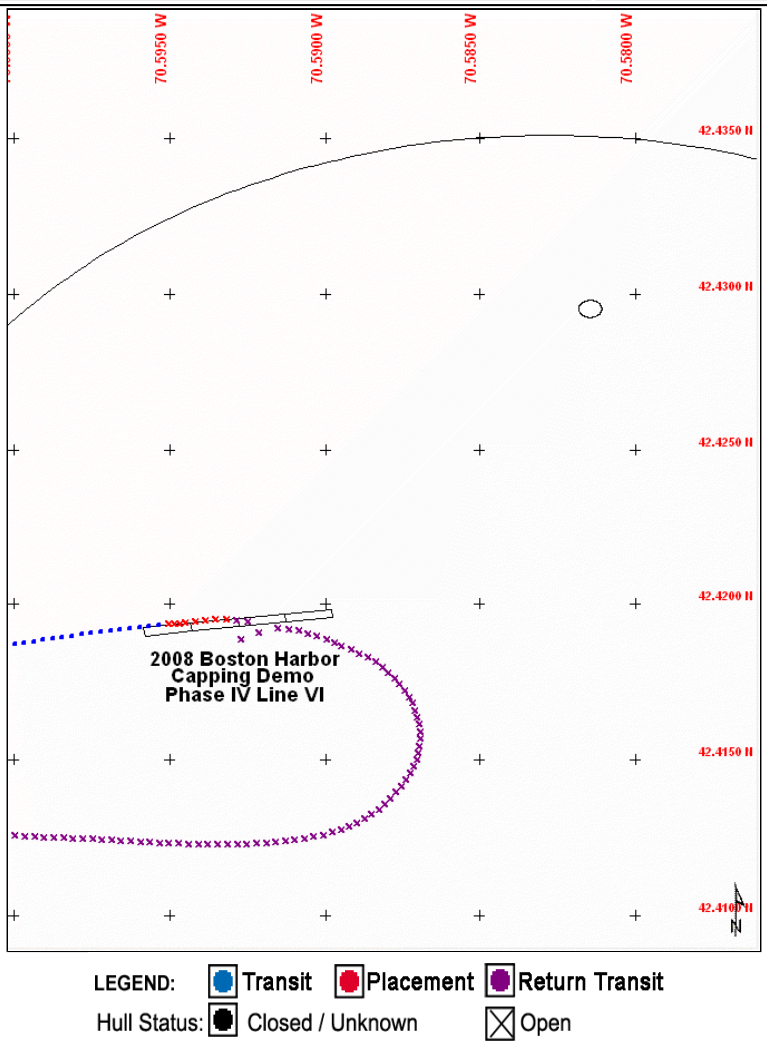
Placement Start:		**Placement End:**	
Time:	8/17/2008 07:01:50	**Time:**	8/17/2008 07:02:25
Lat:	42.419358	**Lat:**	42.419502
Long:	-70.595056	**Long:**	-70.593190
Aft Draft:	18.45 ft	**Aft Draft:**	11.47 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/17/2008 3:33:00 AM (Local)

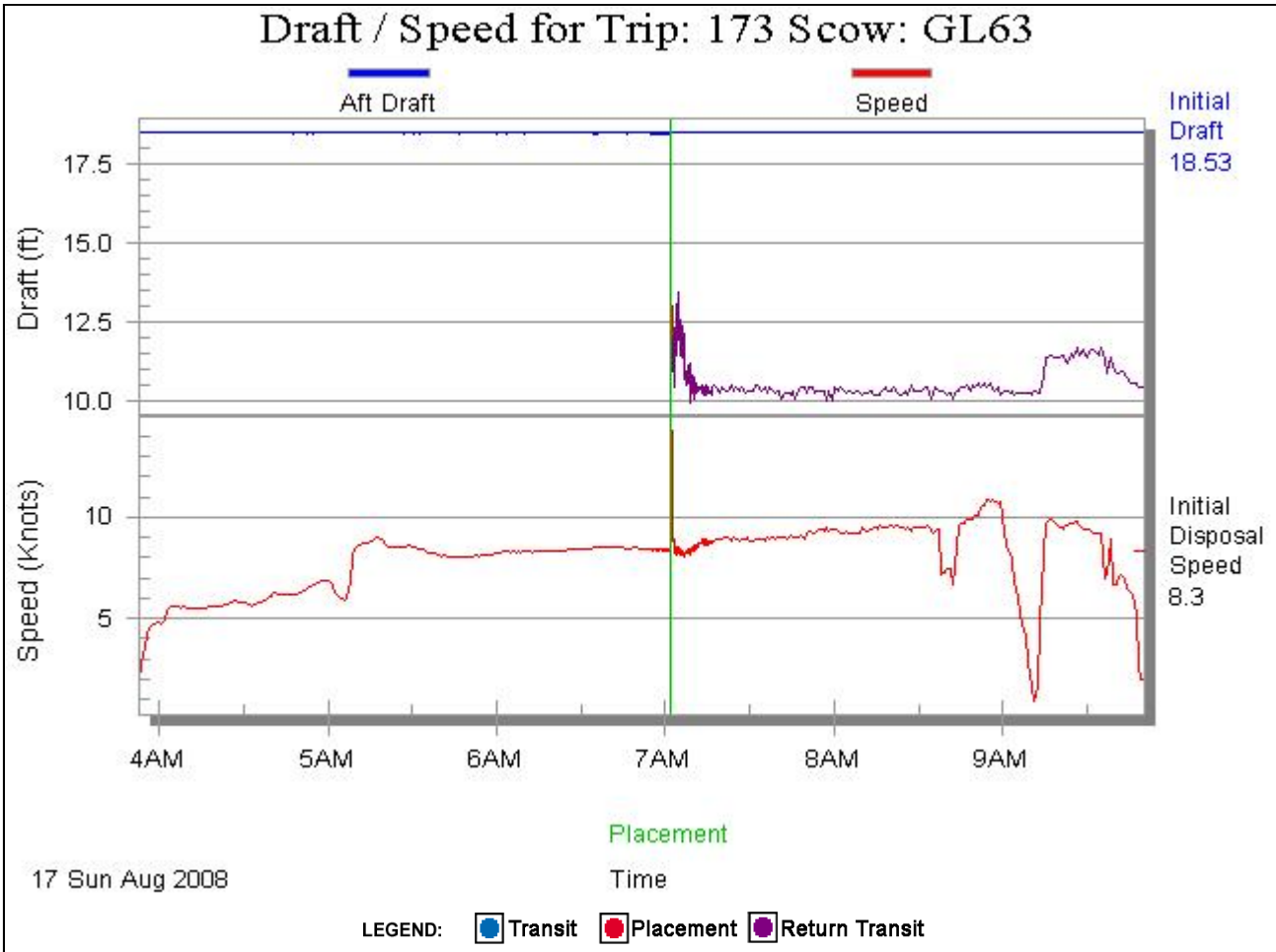
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	173
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/17/2008 03:52:47
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/17/2008 07:01:50	**Time:**	8/17/2008 07:02:25
Latitude:	42.419358	**Latitude:**	42.419502
Longitude:	-70.595056	**Longitude:**	-70.593190
Aft Draft:	18.45 ft	**Aft Draft:**	11.47 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163650

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	174
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/17/2008 10:21:12
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

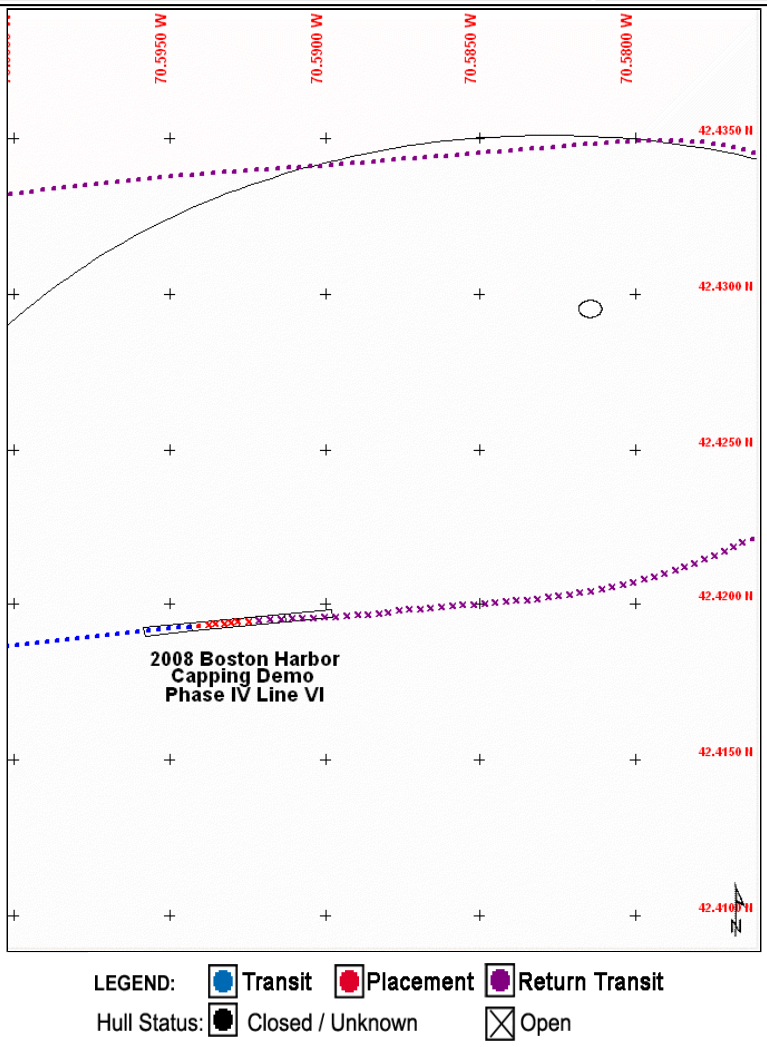
Placement Start:		**Placement End:**	
Time:	8/17/2008 13:22:35	**Time:**	8/17/2008 13:23:04
Lat:	42.419309	**Lat:**	42.419453
Long:	-70.594060	**Long:**	-70.592468
Aft Draft:	20.47 ft	**Aft Draft:**	8.51 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/17/2008 9:47:00 AM (Local)

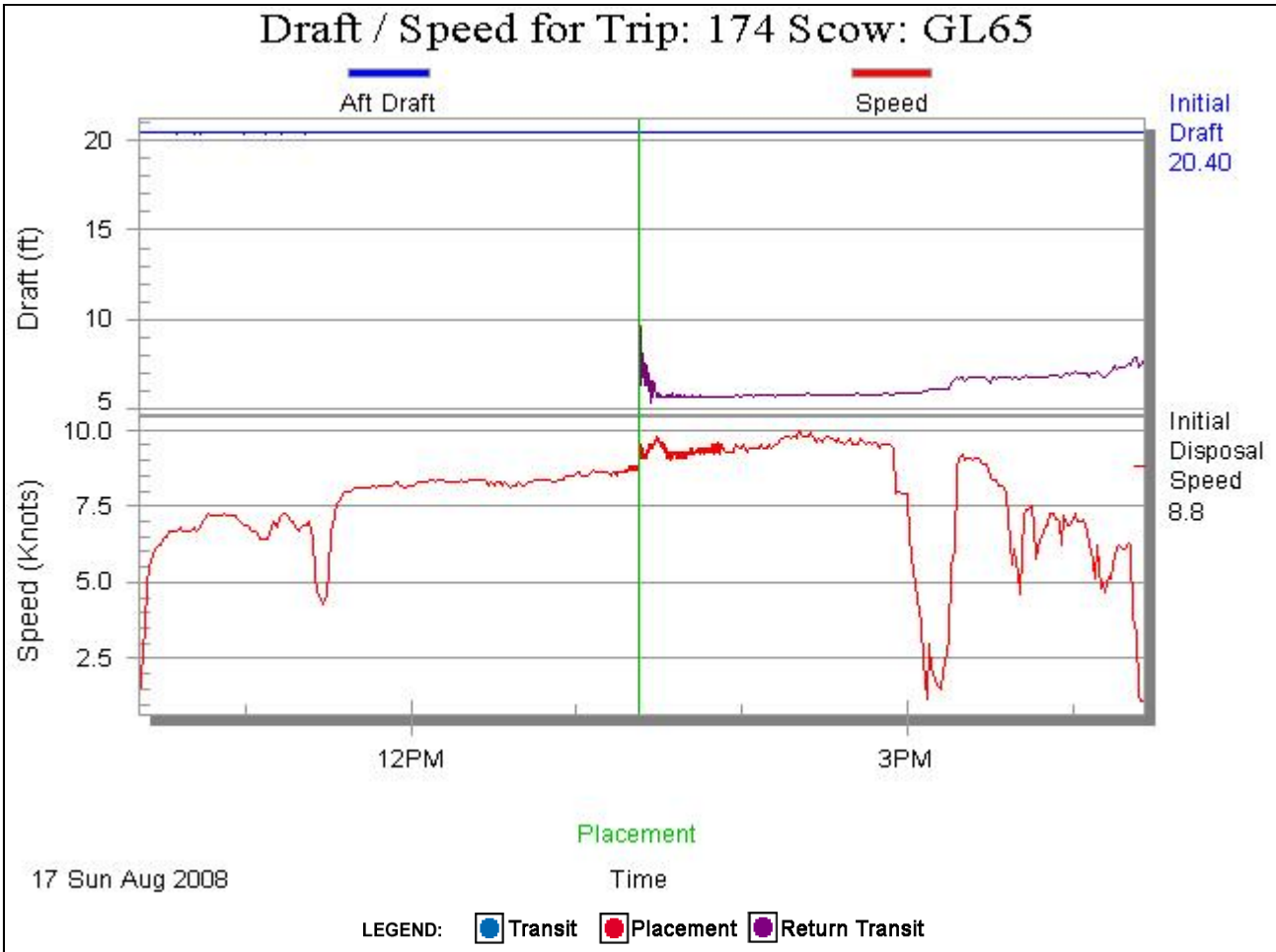
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	174
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/17/2008 10:21:12
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/17/2008 13:22:35
Latitude:	42.419309
Longitude:	-70.594060
Aft Draft:	20.47 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/17/2008 13:23:04
Latitude:	42.419453
Longitude:	-70.592468
Aft Draft:	8.51 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163707

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	175
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	8/17/2008 23:26:20
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

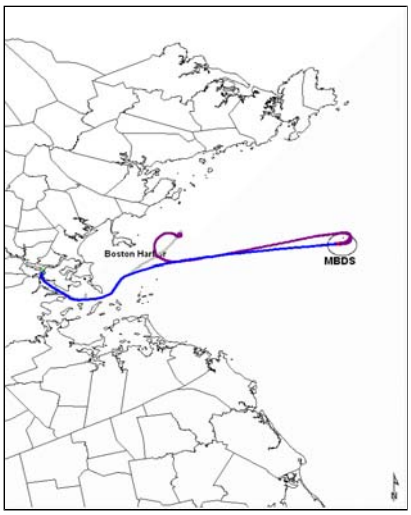
Placement Information:

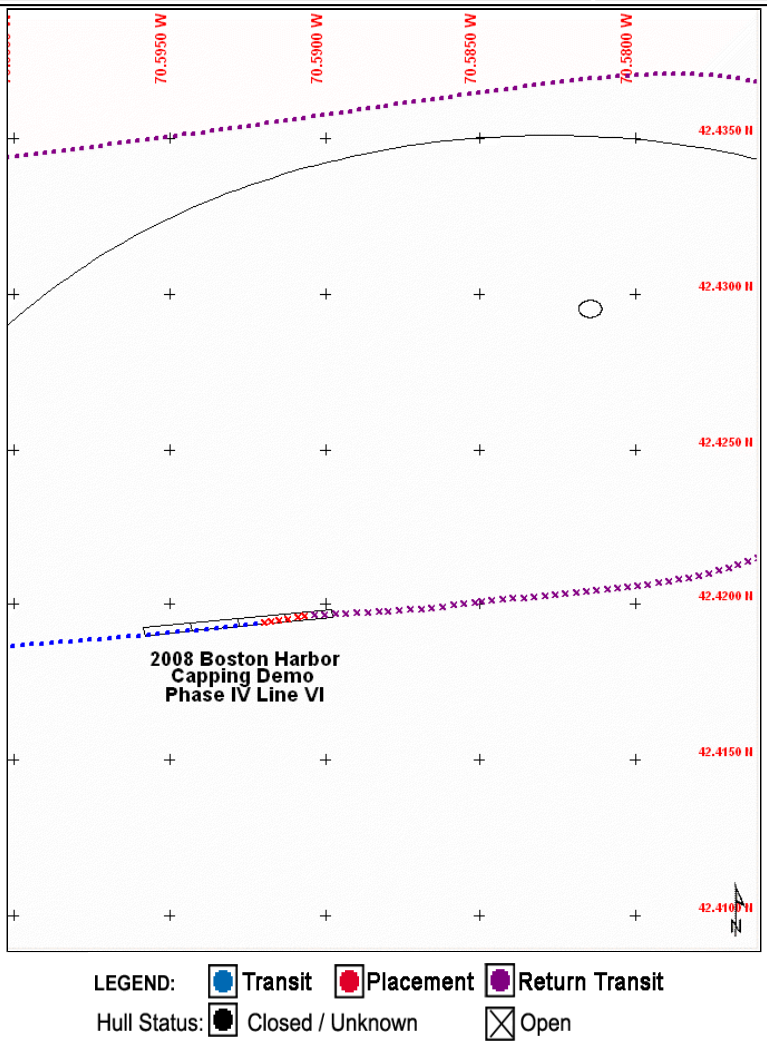
Placement Start:		**Placement End:**	
Time:	8/18/2008 02:52:08	**Time:**	8/18/2008 02:52:33
Lat:	42.419415	**Lat:**	42.419617
Long:	-70.591954	**Long:**	-70.590684
Aft Draft:	18.53 ft	**Aft Draft:**	10.67 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/17/2008 11:11:00 PM (Local)

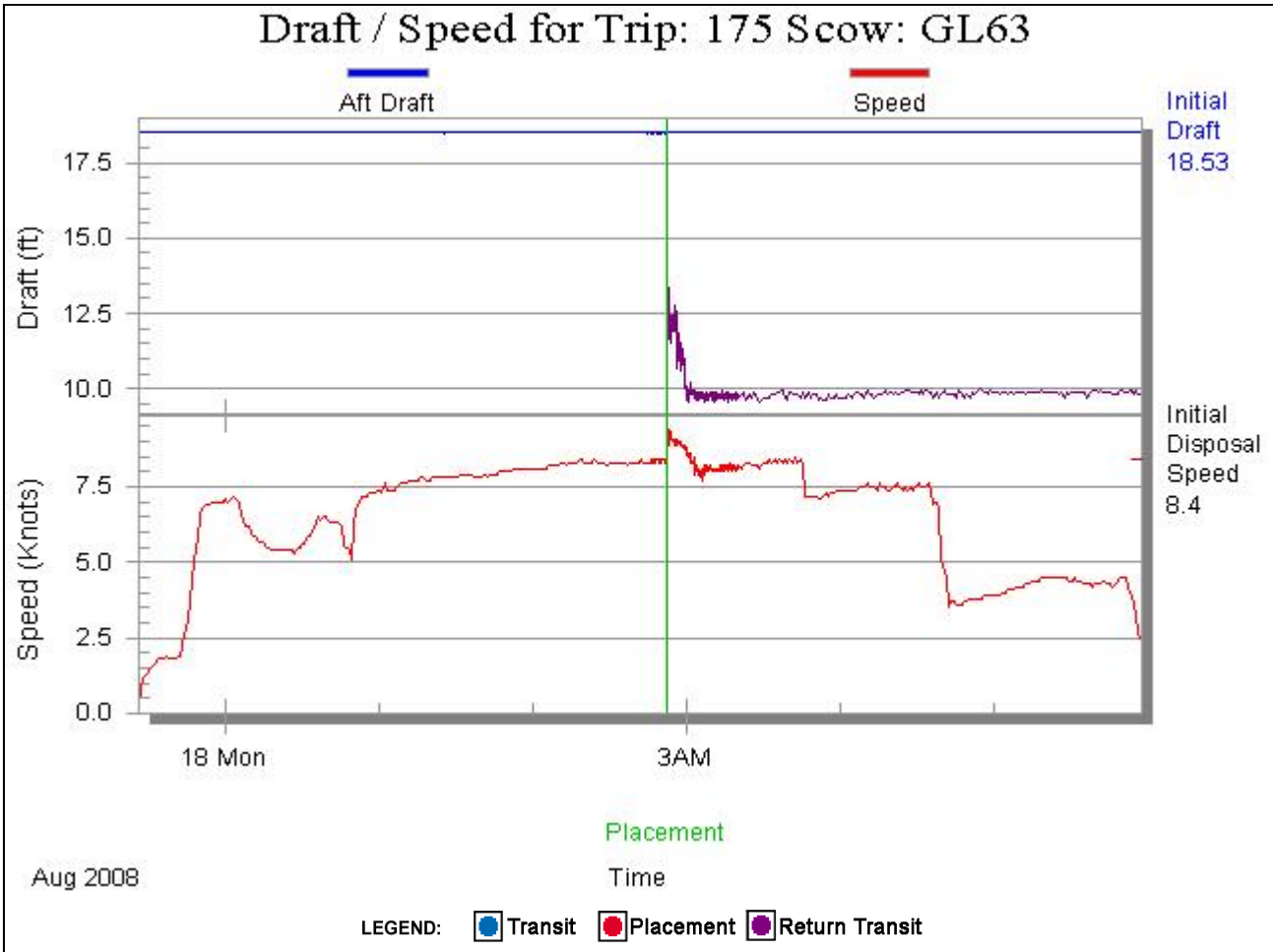
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	175
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	8/17/2008 23:26:20
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/18/2008 02:52:08	**Time:**	8/18/2008 02:52:33
Latitude:	42.419415	**Latitude:**	42.419617
Longitude:	-70.591954	**Longitude:**	-70.590684
Aft Draft:	18.53 ft	**Aft Draft:**	10.67 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081808_163725

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	176
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/18/2008 22:52:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

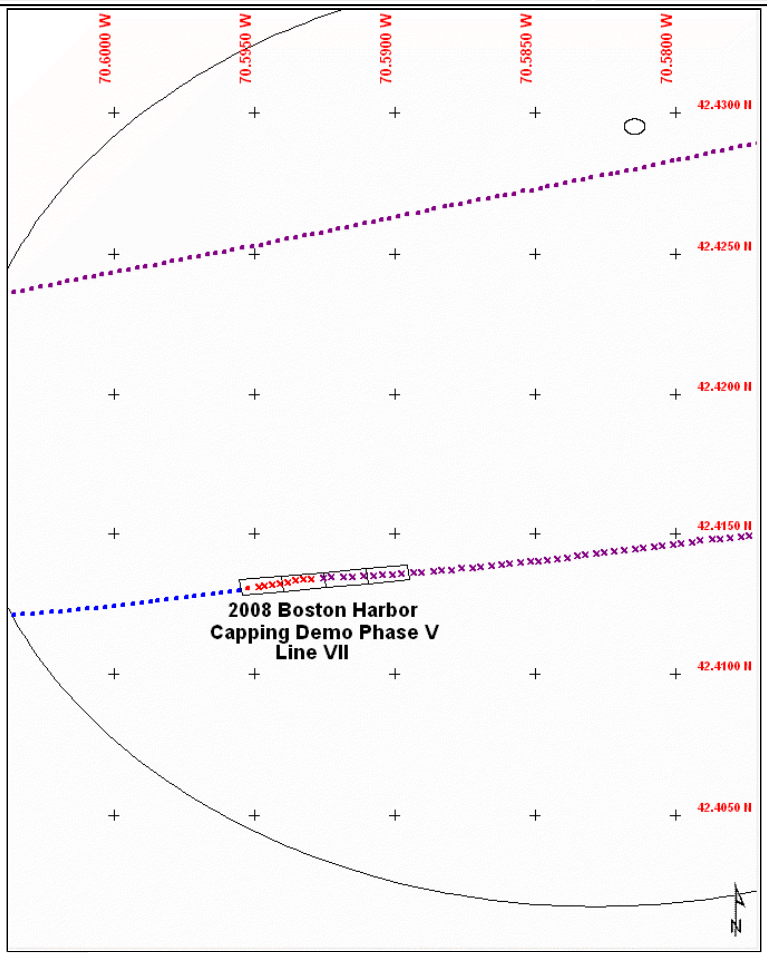
Placement Start:		**Placement End:**	
Time:	8/19/2008 01:32:37	**Time:**	8/19/2008 01:33:18
Lat:	42.413055	**Lat:**	42.413396
Long:	-70.595240	**Long:**	-70.592978
Aft Draft:	18.53 ft	**Aft Draft:**	10.28 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/18/2008 10:33:00 PM (Local)

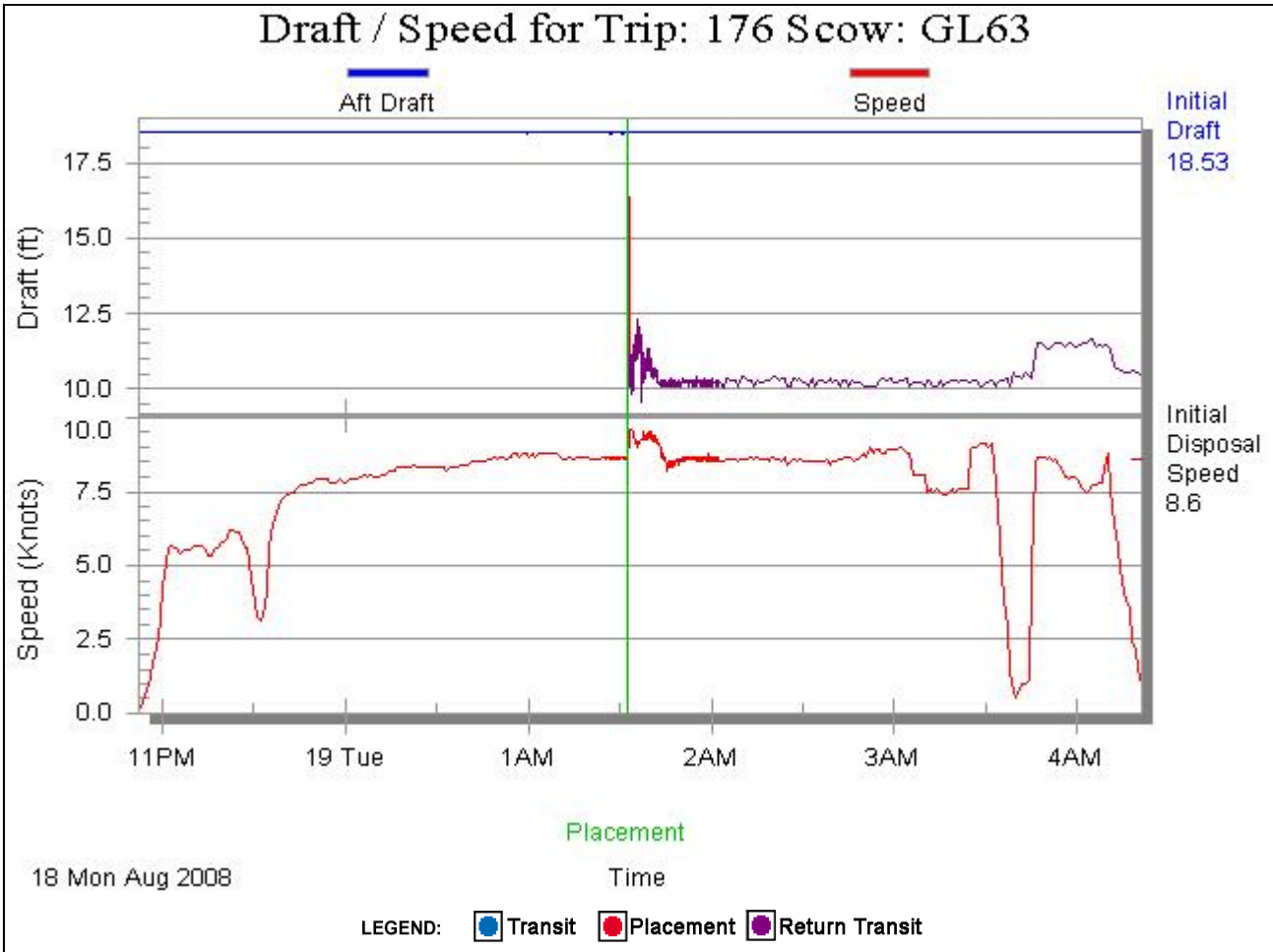
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	176
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/18/2008 22:52:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/19/2008 01:32:37
Latitude:	42.413055
Longitude:	-70.595240
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/19/2008 01:33:18
Latitude:	42.413396
Longitude:	-70.592978
Aft Draft:	10.28 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081908_154656

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	177
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/19/2008 08:36:33
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

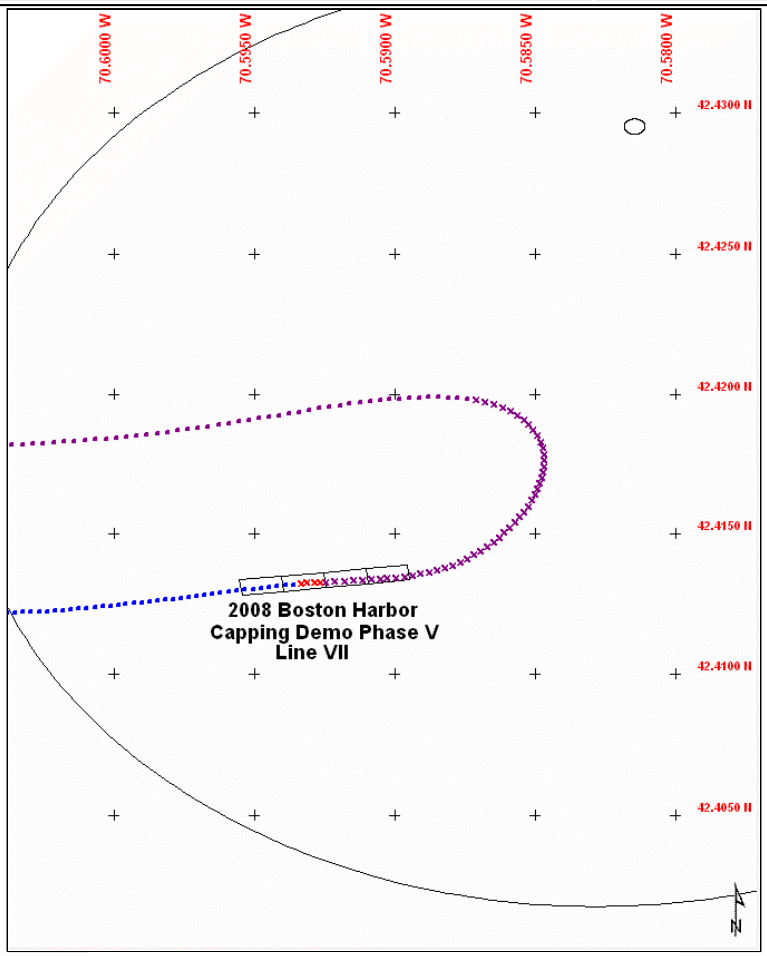
Placement Start:		**Placement End:**	
Time:	8/19/2008 11:19:10	**Time:**	8/19/2008 11:19:23
Lat:	42.413235	**Lat:**	42.413264
Long:	-70.593342	**Long:**	-70.592677
Aft Draft:	20.40 ft	**Aft Draft:**	6.67 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/19/2008 8:14:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



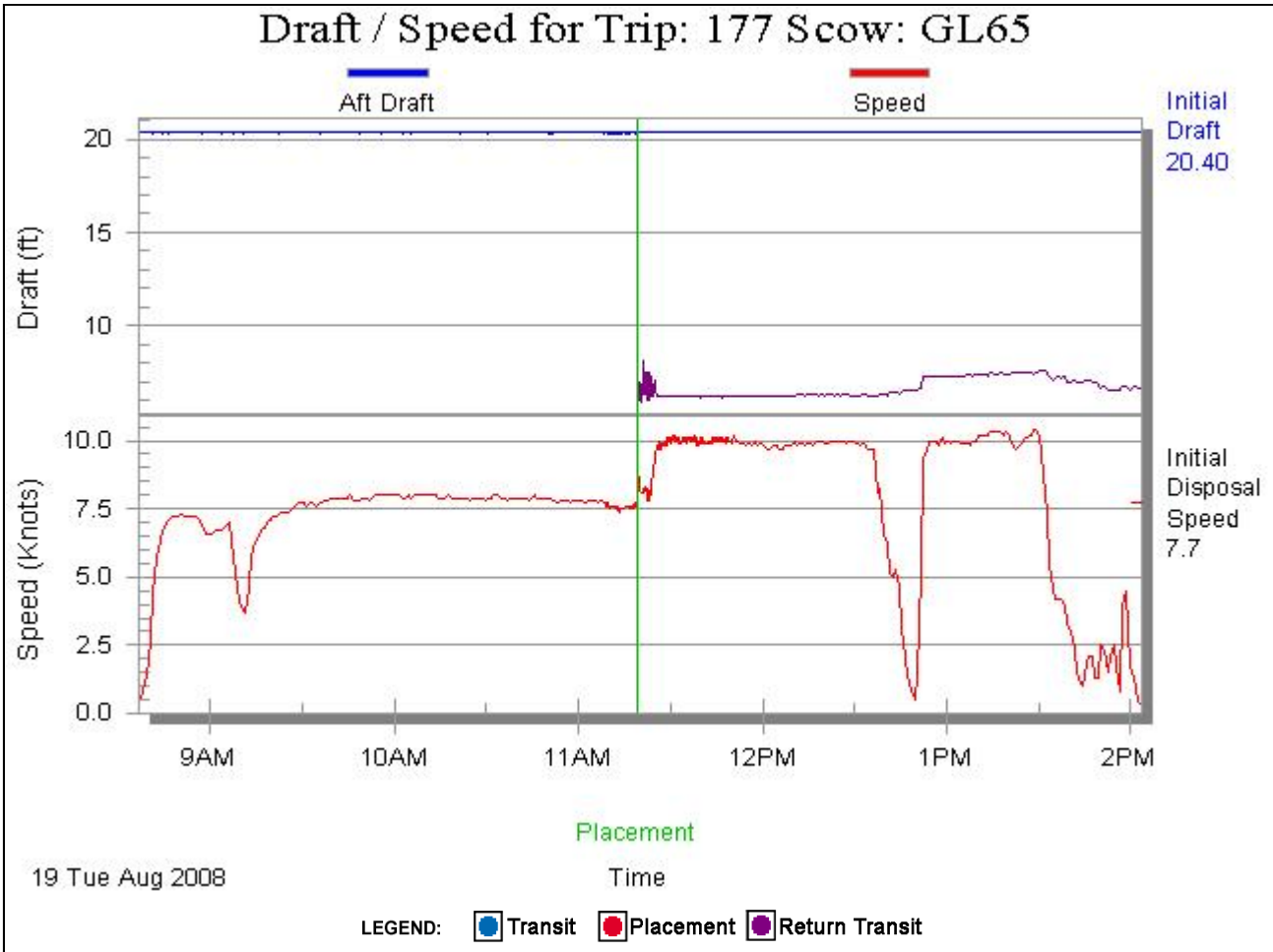


LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	177
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	8/19/2008 08:36:33
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/19/2008 11:19:10
Latitude:	42.413235
Longitude:	-70.593342
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/19/2008 11:19:23
Latitude:	42.413264
Longitude:	-70.592677
Aft Draft:	6.67 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 081908_154333

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	178
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/19/2008 14:35:44
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

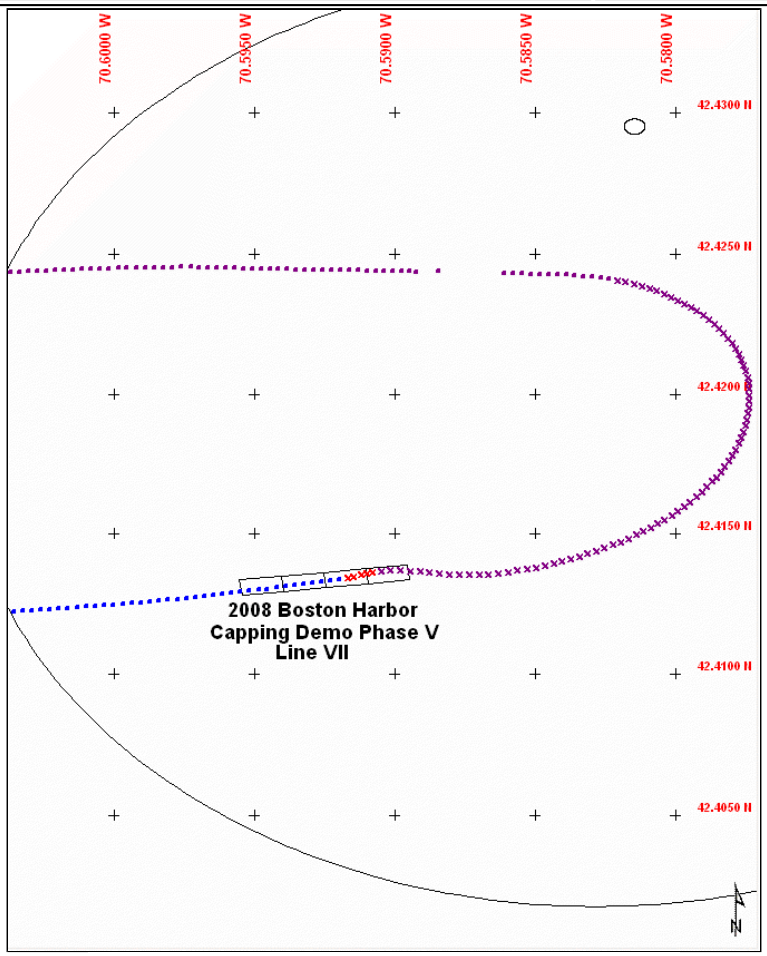
Placement Start:		**Placement End:**	
Time:	8/19/2008 17:12:13	**Time:**	8/19/2008 17:12:30
Lat:	42.413440	**Lat:**	42.413625
Long:	-70.591697	**Long:**	-70.590808
Aft Draft:	18.61 ft	**Aft Draft:**	10.36 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/19/2008 2:08:00 PM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



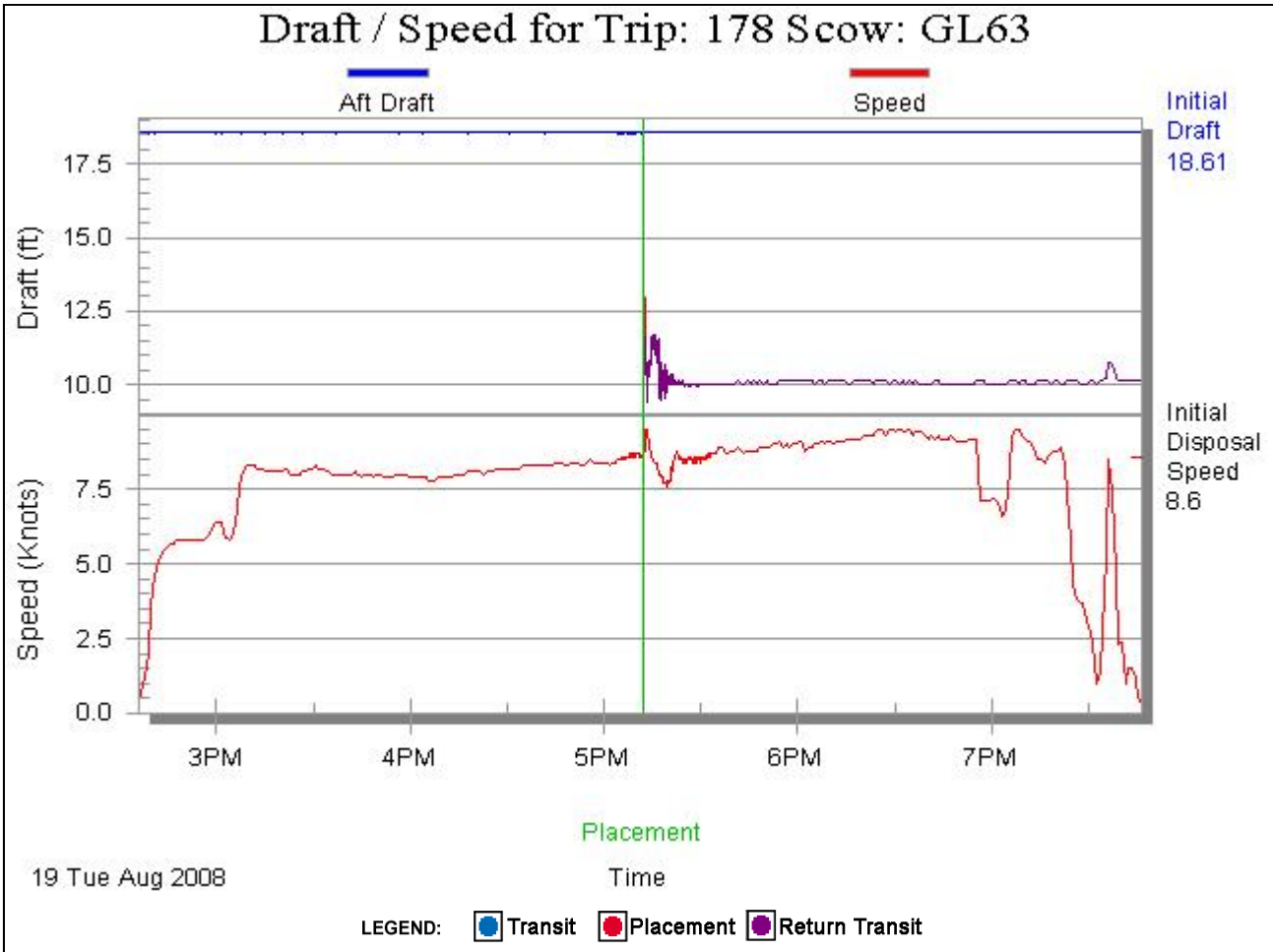


LEGEND: Transit Placement Return Transit

Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	178
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/19/2008 14:35:44
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/19/2008 17:12:13
Latitude:	42.413440
Longitude:	-70.591697
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/19/2008 17:12:30
Latitude:	42.413625
Longitude:	-70.590808
Aft Draft:	10.36 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082008_112237

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

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Trip Information:

Trip #:	179
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/19/2008 22:14:48
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

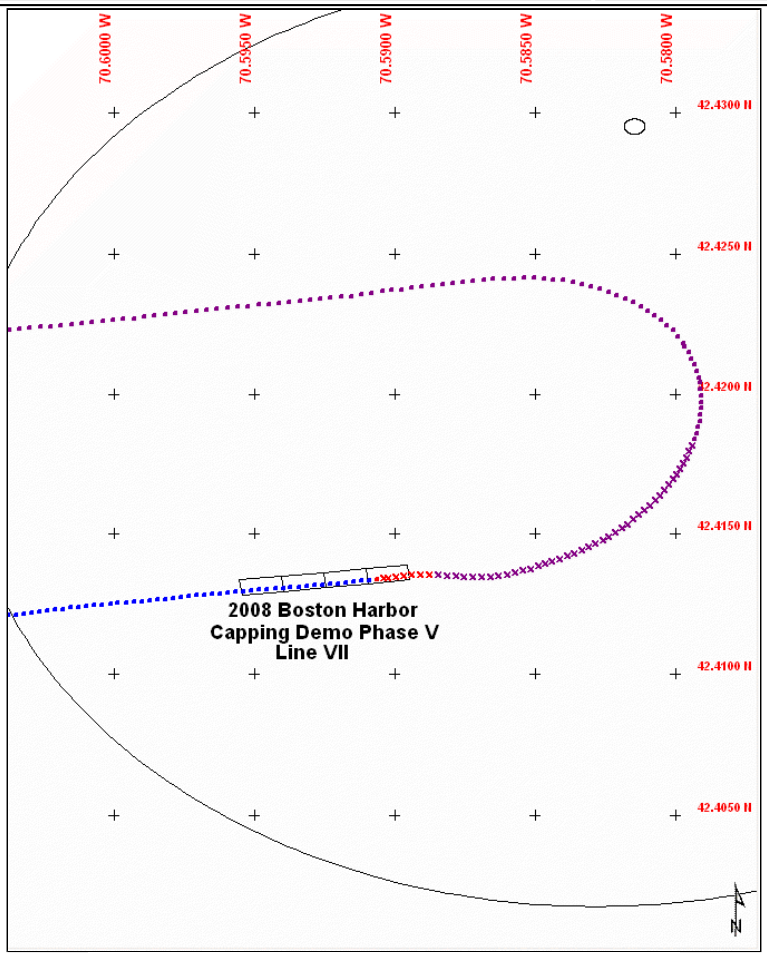
Placement Start:		**Placement End:**	
Time:	8/20/2008 01:06:58	**Time:**	8/20/2008 01:07:37
Lat:	42.413382	**Lat:**	42.413546
Long:	-70.590661	**Long:**	-70.588753
Aft Draft:	20.32 ft	**Aft Draft:**	7.85 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/19/2008 9:49:00 PM (Local)

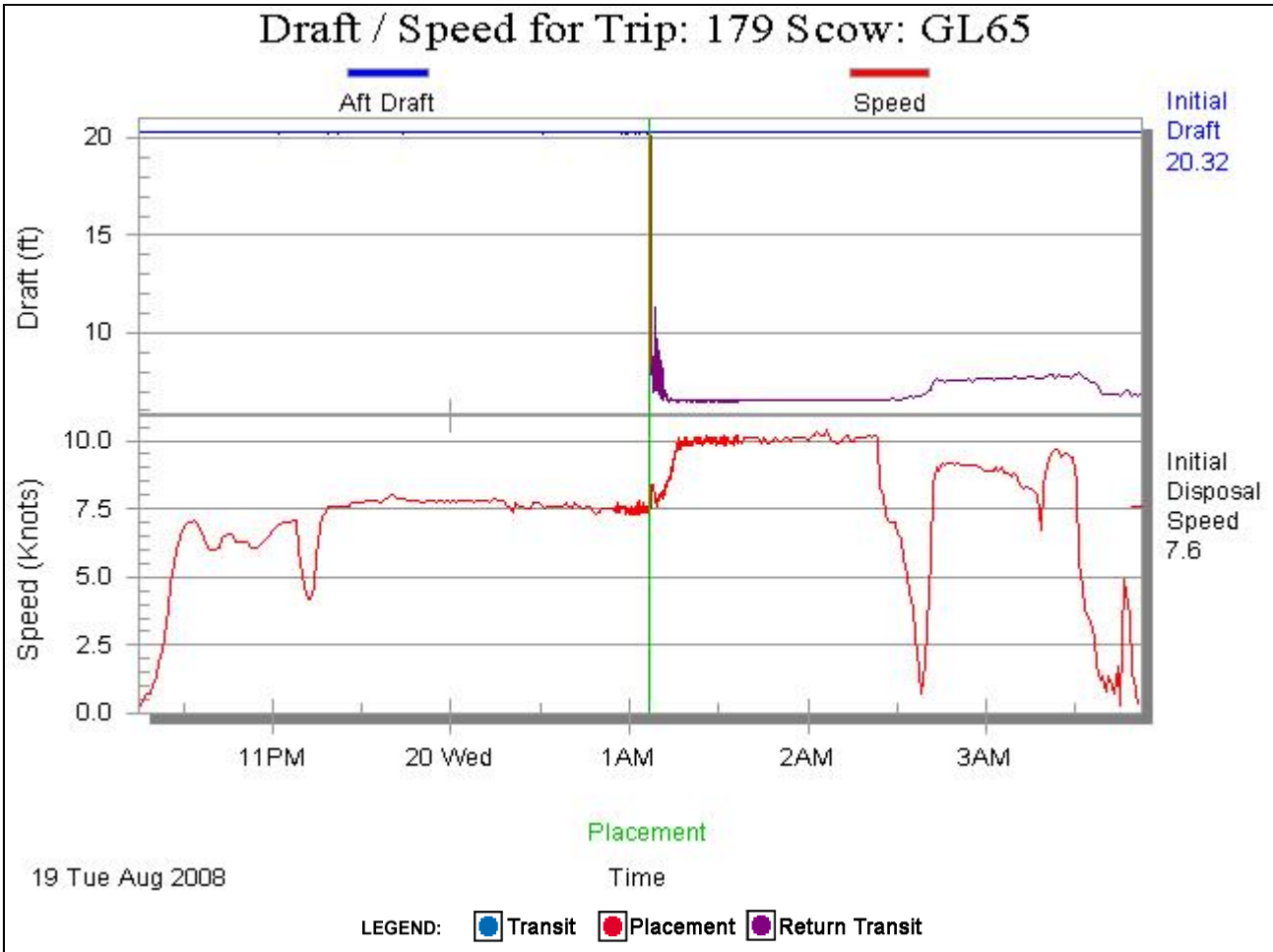
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	179
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/19/2008 22:14:48
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/20/2008 01:06:58
Latitude:	42.413382
Longitude:	-70.590661
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/20/2008 01:07:37
Latitude:	42.413546
Longitude:	-70.588753
Aft Draft:	7.85 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082008_112545

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

ADISS Automated Disposal Surveillance System

SAIC From Science to Solutions™

Trip Information:

Trip #:	180
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 04:25:27
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

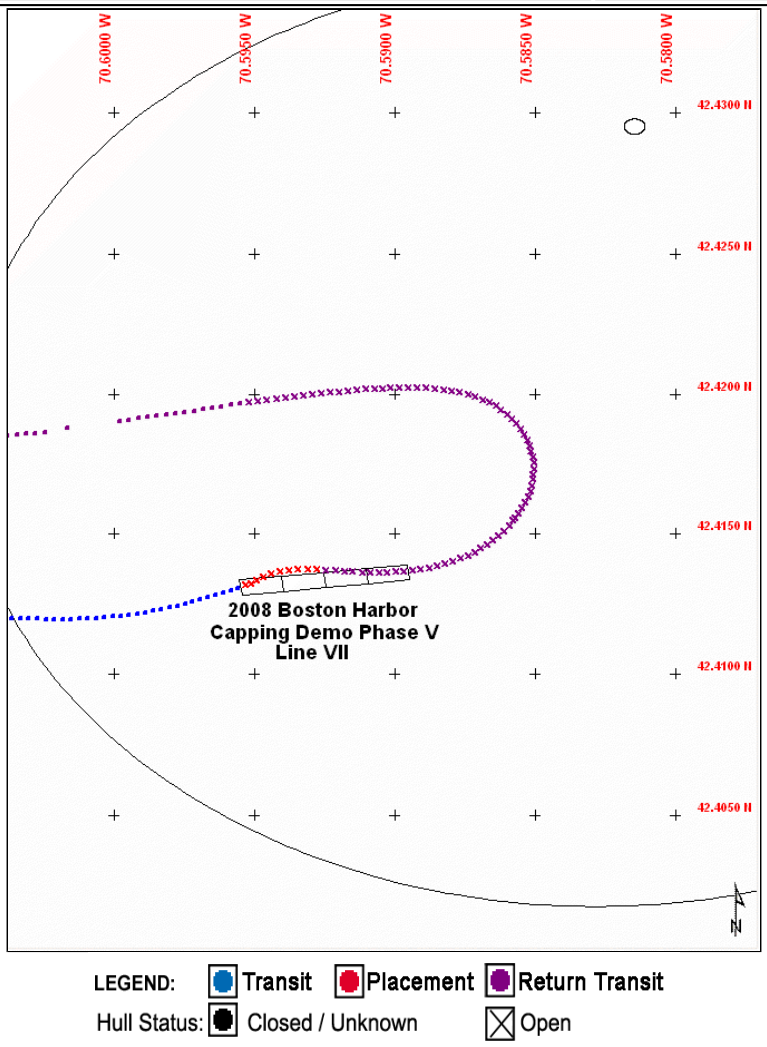
Placement Start:		**Placement End:**	
Time:	8/20/2008 07:02:31	**Time:**	8/20/2008 07:03:22
Lat:	42.413175	**Lat:**	42.413729
Long:	-70.595323	**Long:**	-70.592793
Aft Draft:	18.45 ft	**Aft Draft:**	10.67 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/20/2008 4:08:00 AM (Local)

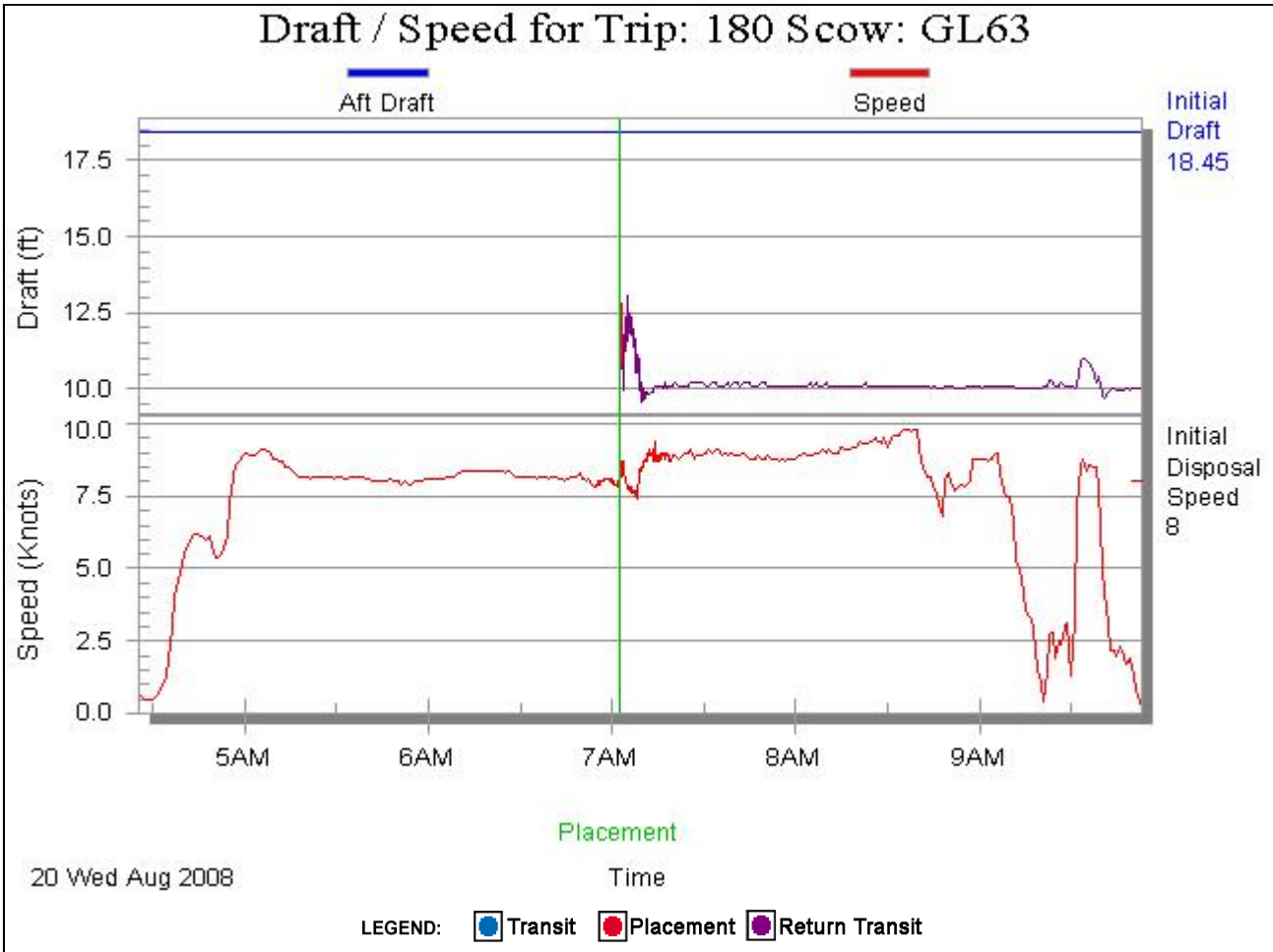
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023



Trip Information

Trip #:	180
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 04:25:27
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/20/2008 07:02:31
Latitude:	42.413175
Longitude:	-70.595323
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/20/2008 07:03:22
Latitude:	42.413729
Longitude:	-70.592793
Aft Draft:	10.67 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082008_112919

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

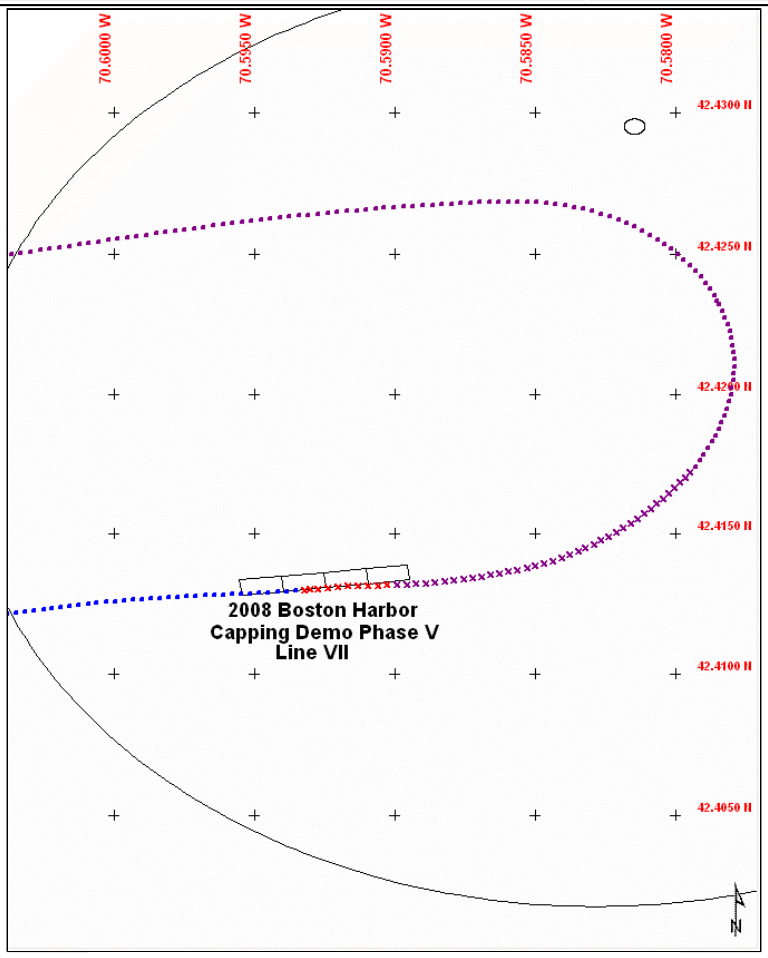
Trip #:	181
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 10:18:58
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/20/2008 12:59:22	**Time:**	8/20/2008 13:00:13
Lat:	42.412998	**Lat:**	42.413174
Long:	-70.593237	**Long:**	-70.590257
Aft Draft:	20.40 ft	**Aft Draft:**	6.59 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/20/2008 9:41:00 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082108_113910

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
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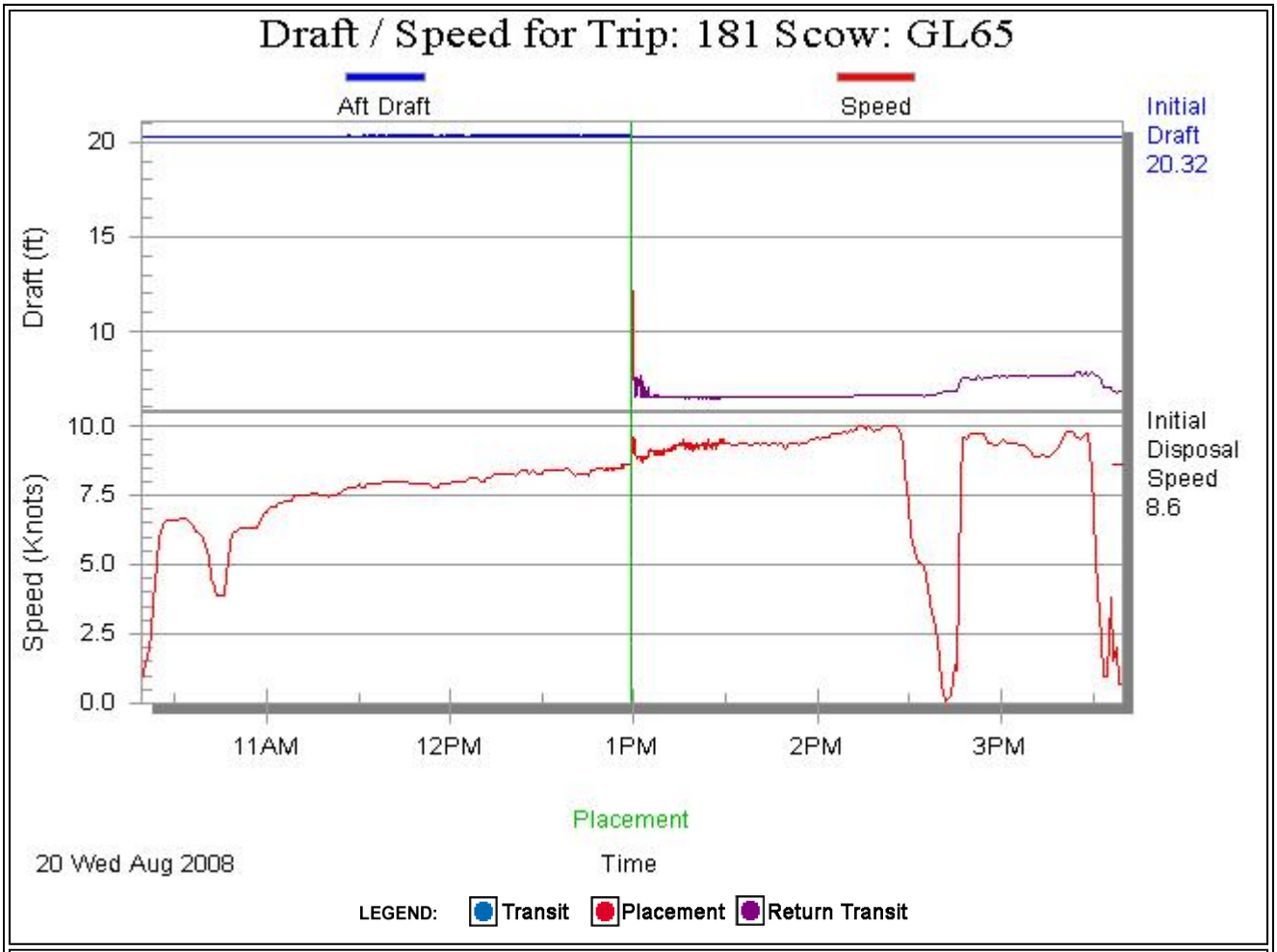


Trip Information

Trip #:	181
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 10:18:58
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/20/2008 12:59:22
Latitude:	42.412998
Longitude:	-70.593237
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/20/2008 13:00:13
Latitude:	42.413174
Longitude:	-70.590257
Aft Draft:	6.59 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082108_113910

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

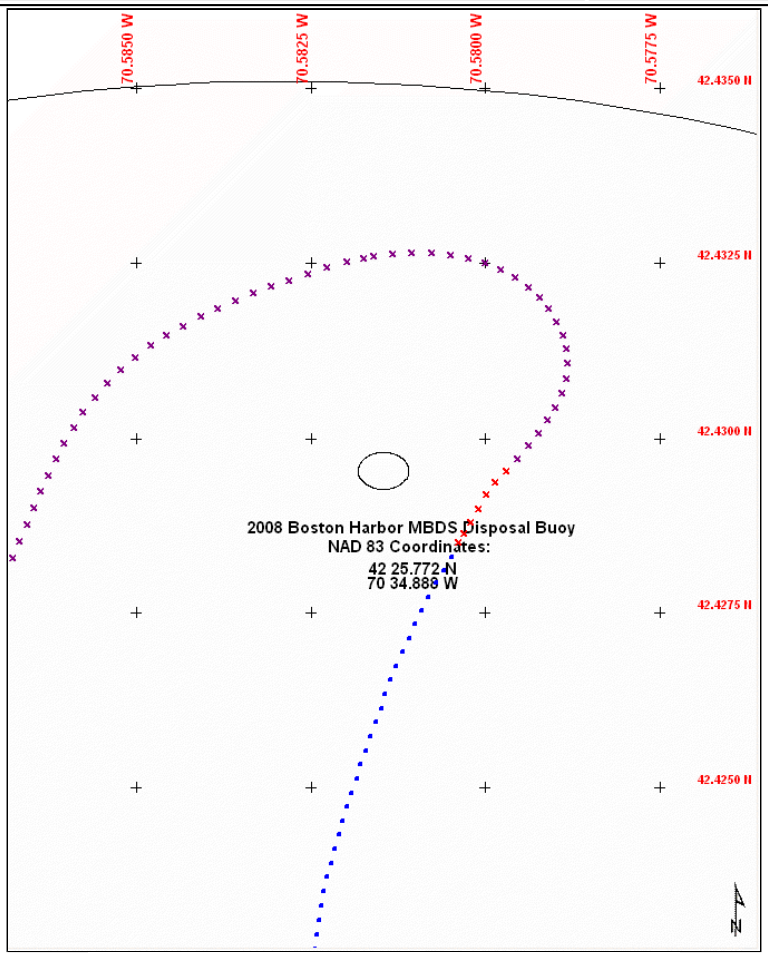
Trip #:	182
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 16:12:31
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/20/2008 18:59:13	**Time:**	8/20/2008 18:59:46
Lat:	42.428492	**Lat:**	42.429536
Long:	-70.580382	**Long:**	-70.579695
Aft Draft:	18.45 ft	**Aft Draft:**	11.07 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/20/2008 3:29:00 PM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082208_155622

ADISS
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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

SAIC
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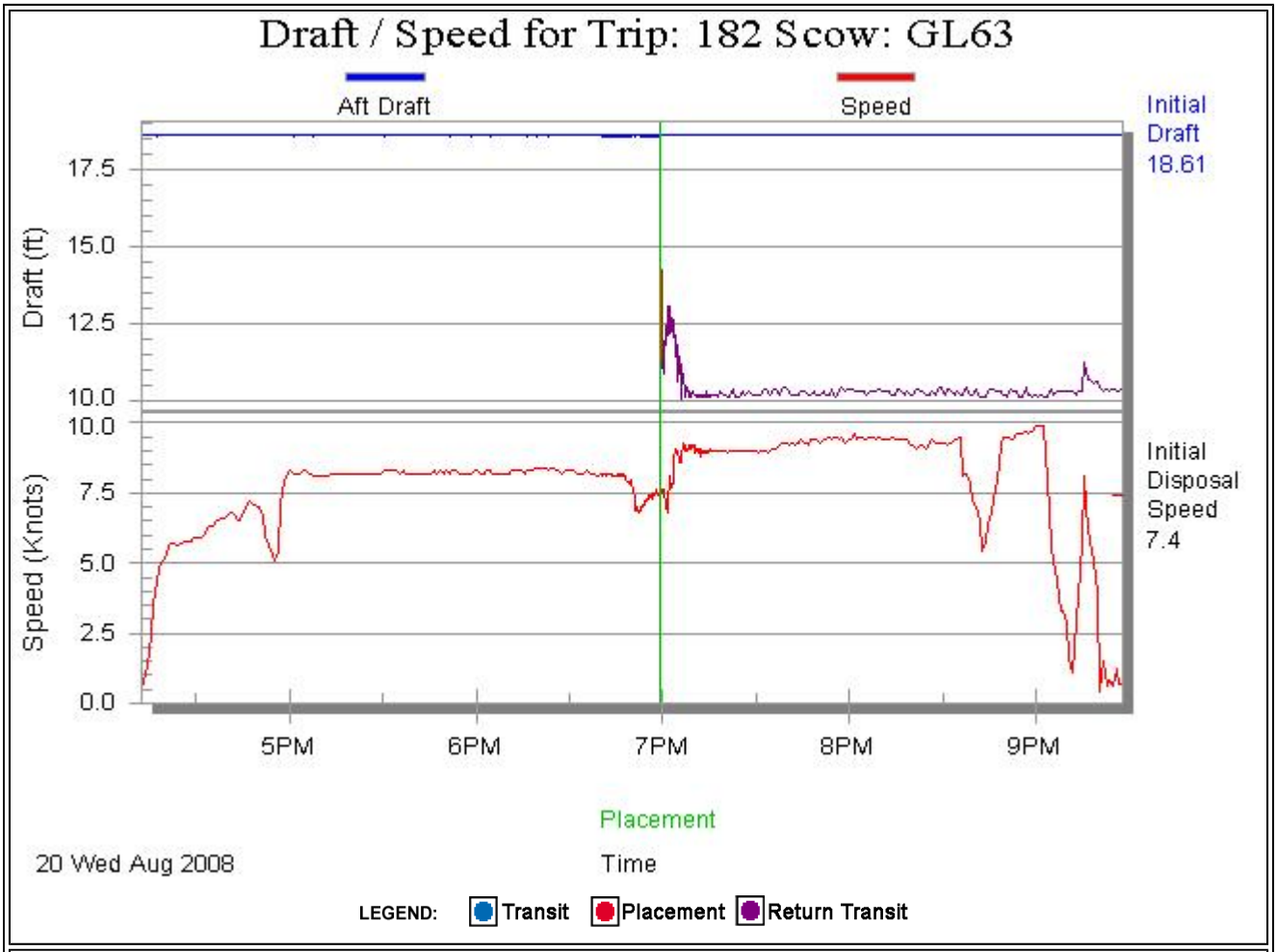


Trip Information

Trip #:	182
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 16:12:31
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/20/2008 18:59:13
Latitude:	42.428492
Longitude:	-70.580382
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/20/2008 18:59:46
Latitude:	42.429536
Longitude:	-70.579695
Aft Draft:	11.07 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082208_155622

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

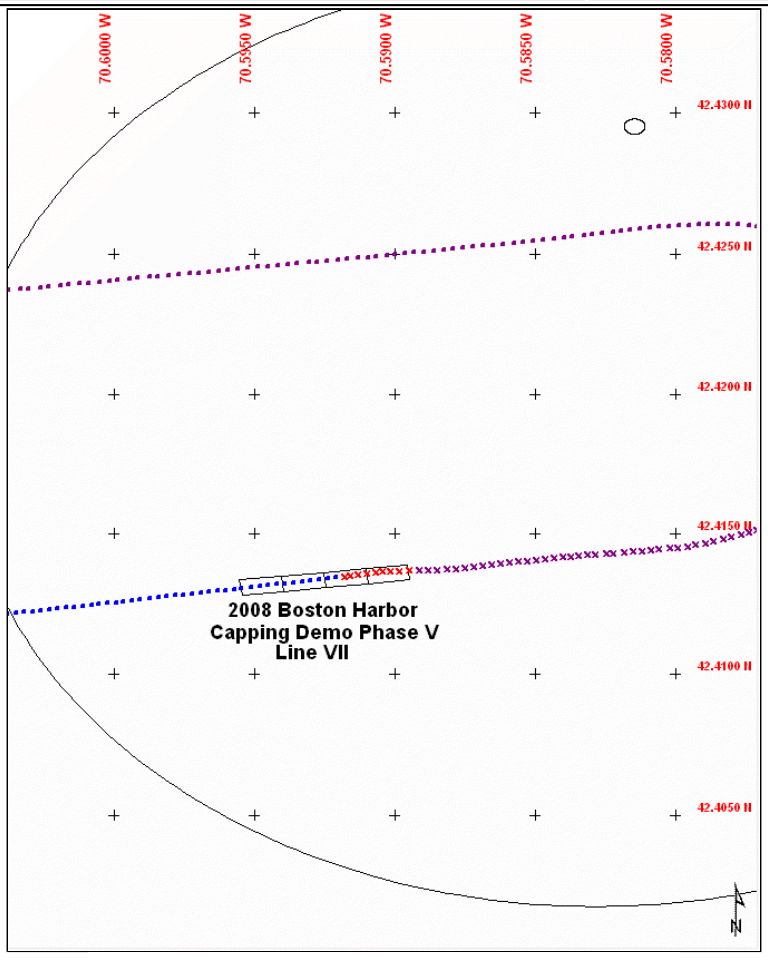
Trip #:	183
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 23:45:35
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/21/2008 02:33:28	**Time:**	8/21/2008 02:34:11
Lat:	42.413483	**Lat:**	42.413684
Long:	-70.591813	**Long:**	-70.589470
Aft Draft:	20.32 ft	**Aft Draft:**	6.37 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/20/2008 11:10:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082108_124807

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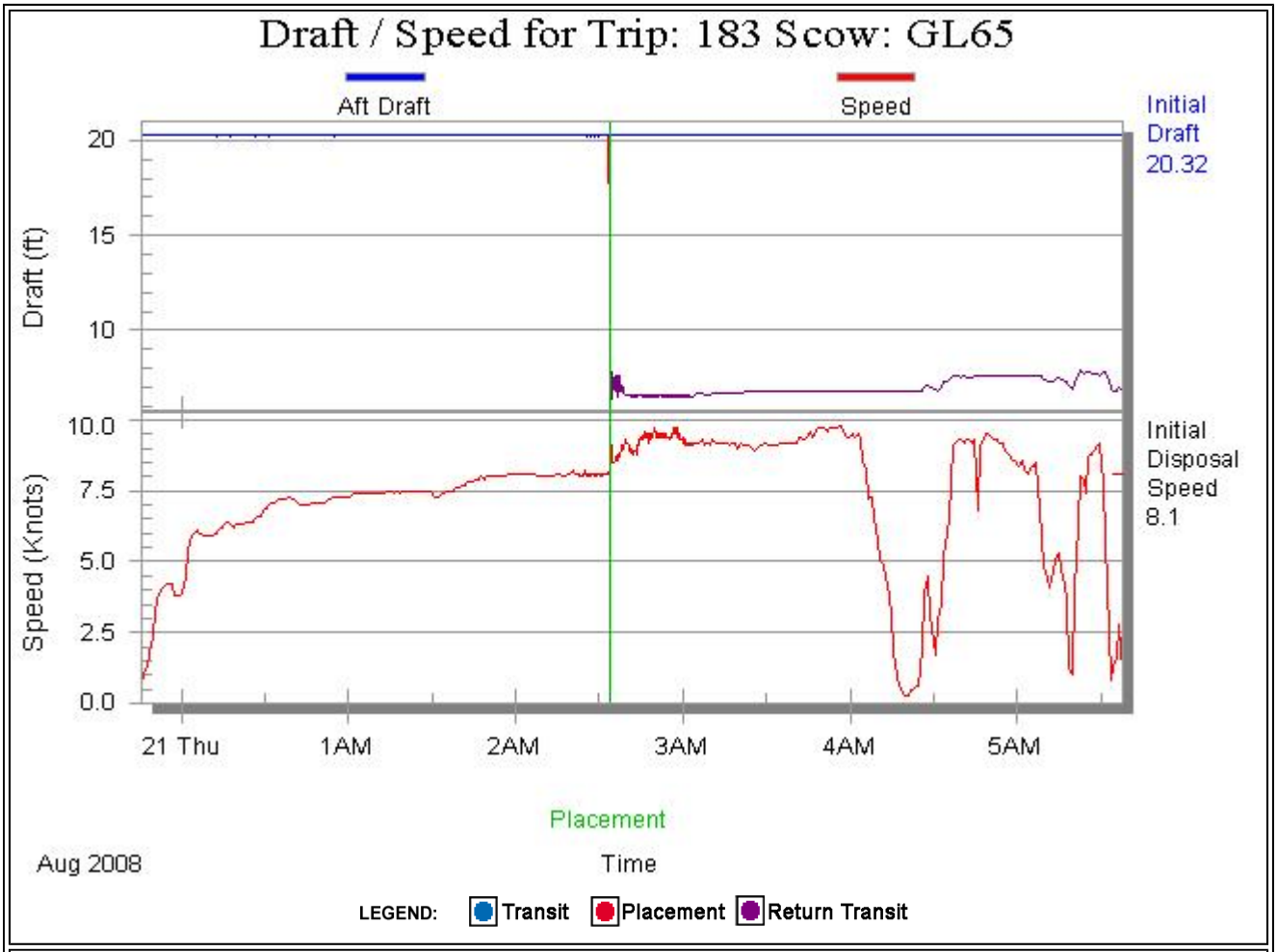


Trip Information

Trip #:	183
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/20/2008 23:45:35
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/21/2008 02:33:28
Latitude:	42.413483
Longitude:	-70.591813
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/21/2008 02:34:11
Latitude:	42.413684
Longitude:	-70.589470
Aft Draft:	6.37 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082108_124807

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

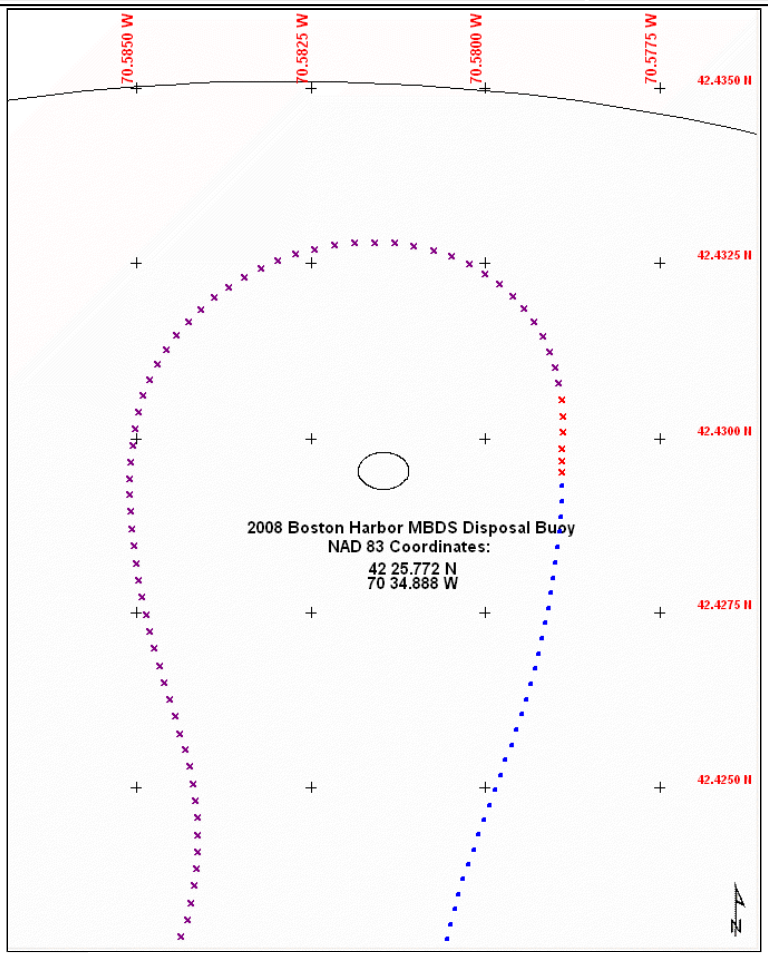
Trip #:	184
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/21/2008 06:10:27
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/21/2008 08:46:07	**Time:**	8/21/2008 08:46:34
Lat:	42.429520	**Lat:**	42.430552
Long:	-70.578909	**Long:**	-70.578909
Aft Draft:	18.45 ft	**Aft Draft:**	10.75 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/21/2008 5:29:00 AM (Local)
Wave Height: 0.7 ft **Dominant Wave Period:** Not Avail. **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082208_121337

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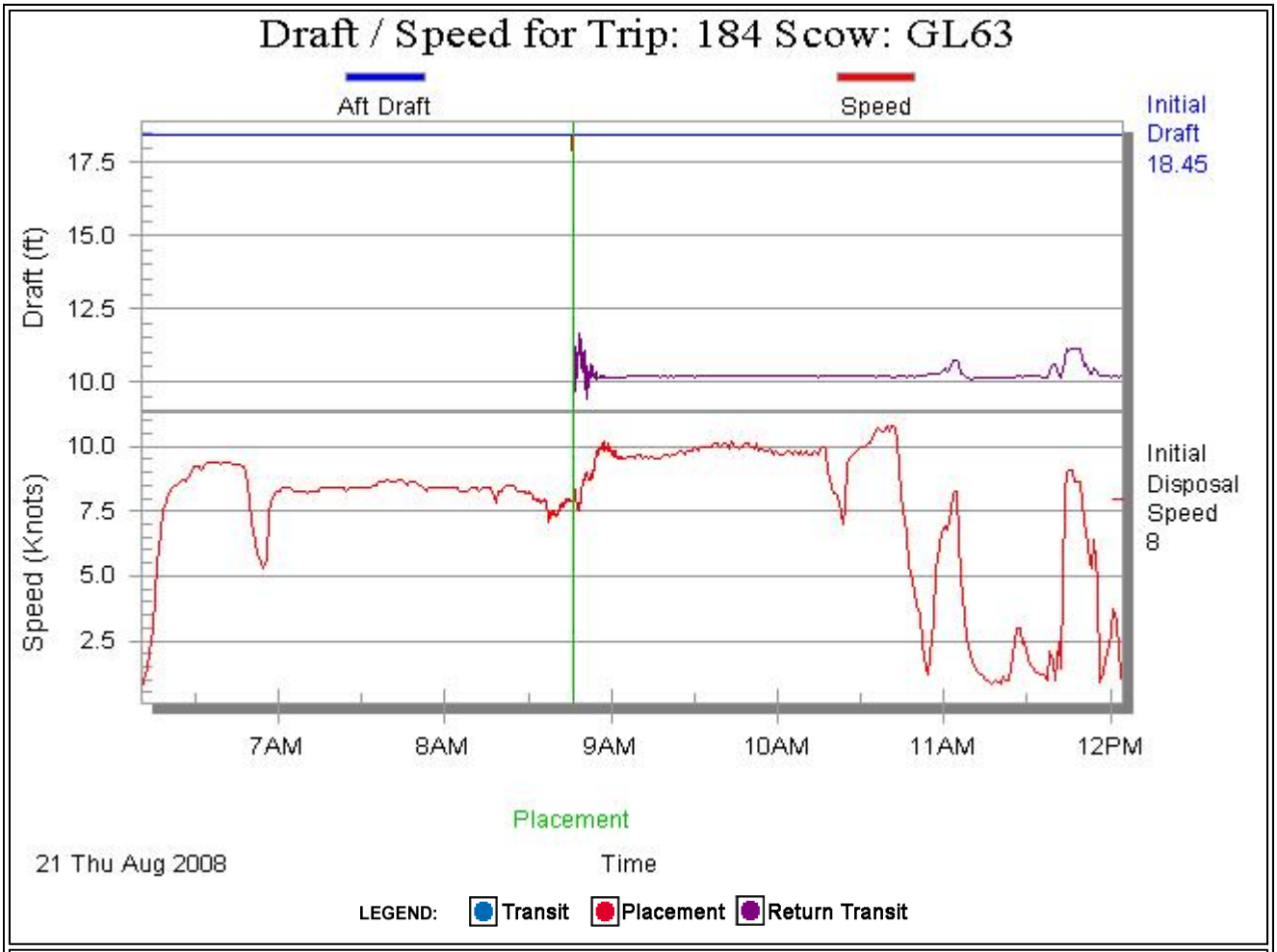


Trip Information

Trip #:	184
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/21/2008 06:10:27
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/21/2008 08:46:07
Latitude:	42.429520
Longitude:	-70.578909
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/21/2008 08:46:34
Latitude:	42.430552
Longitude:	-70.578909
Aft Draft:	10.75 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082208_121337

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

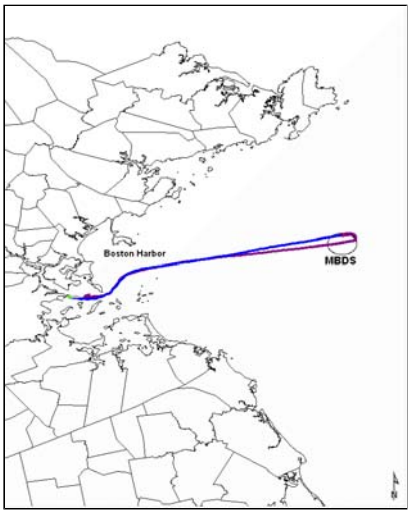
Trip Information:

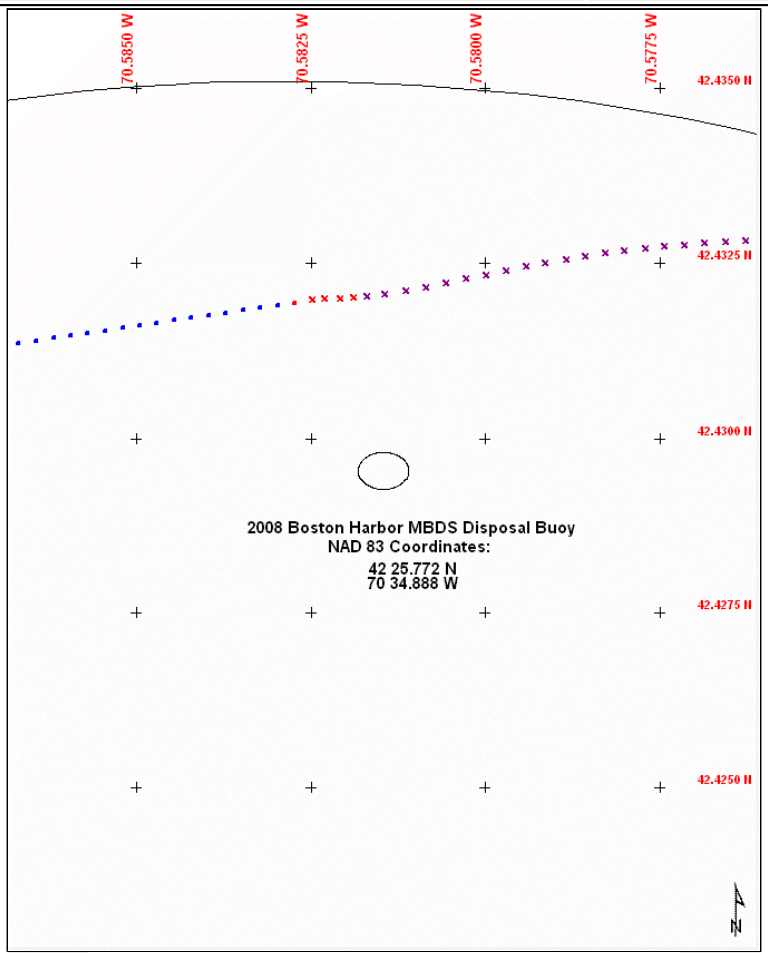
Trip #:	185
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/21/2008 19:51:37
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/21/2008 23:11:33	**Time:**	8/21/2008 23:11:52
Lat:	42.431938	**Lat:**	42.432006
Long:	-70.582733	**Long:**	-70.581896
Aft Draft:	20.32 ft	**Aft Draft:**	7.40 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/21/2008 7:51:37 PM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082208_122141

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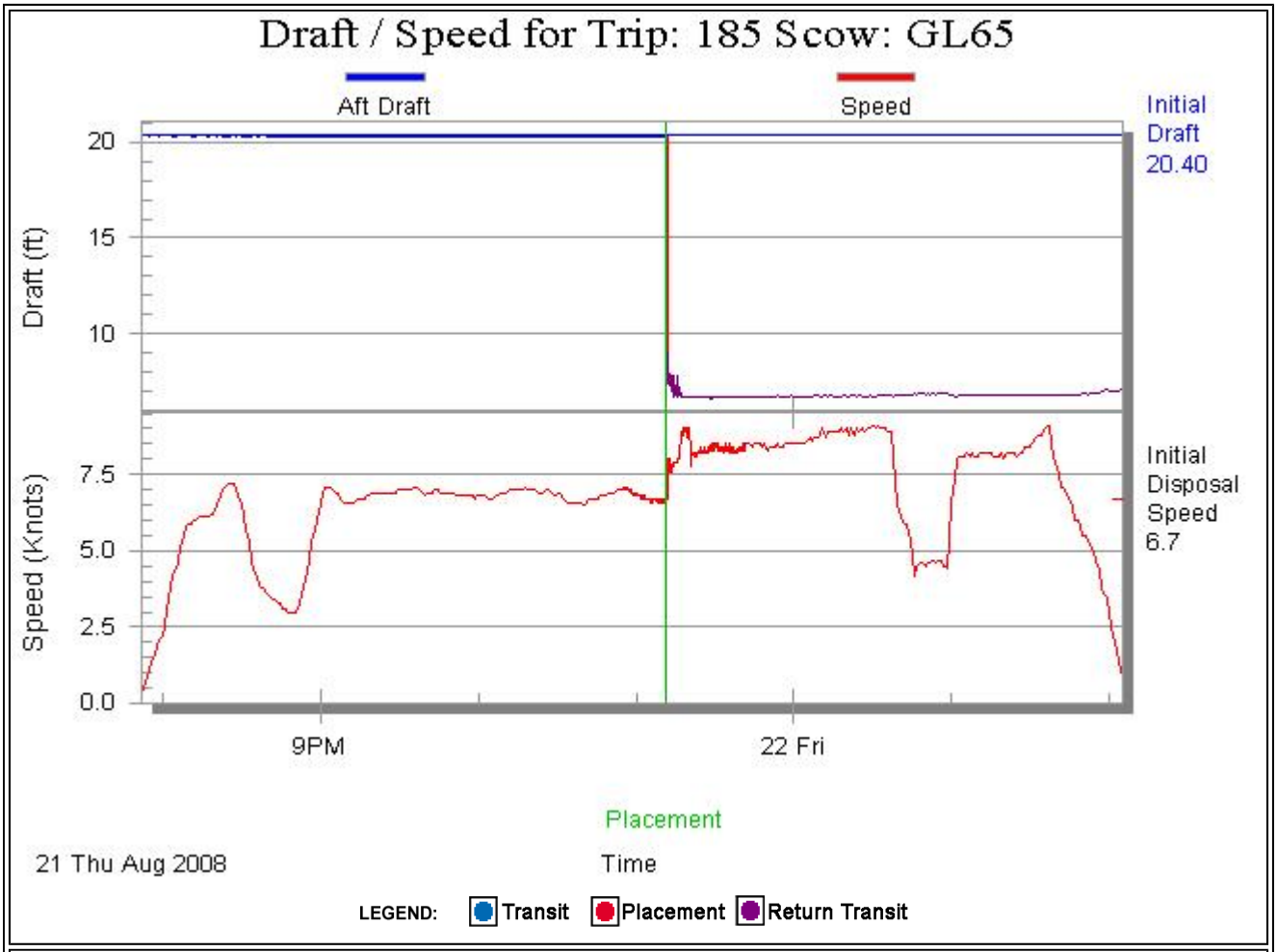


Trip Information

Trip #:	185
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/21/2008 19:51:37
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/21/2008 23:11:33
Latitude:	42.431938
Longitude:	-70.582733
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/21/2008 23:11:52
Latitude:	42.432006
Longitude:	-70.581896
Aft Draft:	7.40 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082208_122141

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

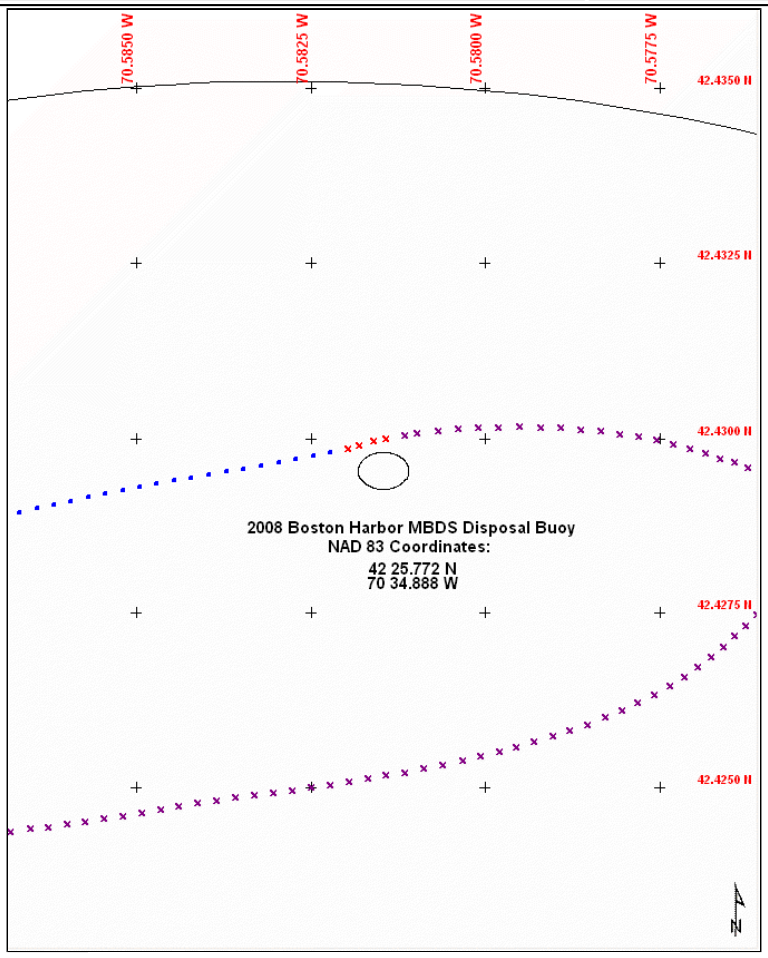
Trip #:	186
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/22/2008 03:15:35
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/22/2008 06:32:24	**Time:**	8/22/2008 06:32:37
Lat:	42.429848	**Lat:**	42.429987
Long:	-70.581981	**Long:**	-70.581423
Aft Draft:	18.45 ft	**Aft Draft:**	10.99 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/22/2008 3:15:35 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082208_122645

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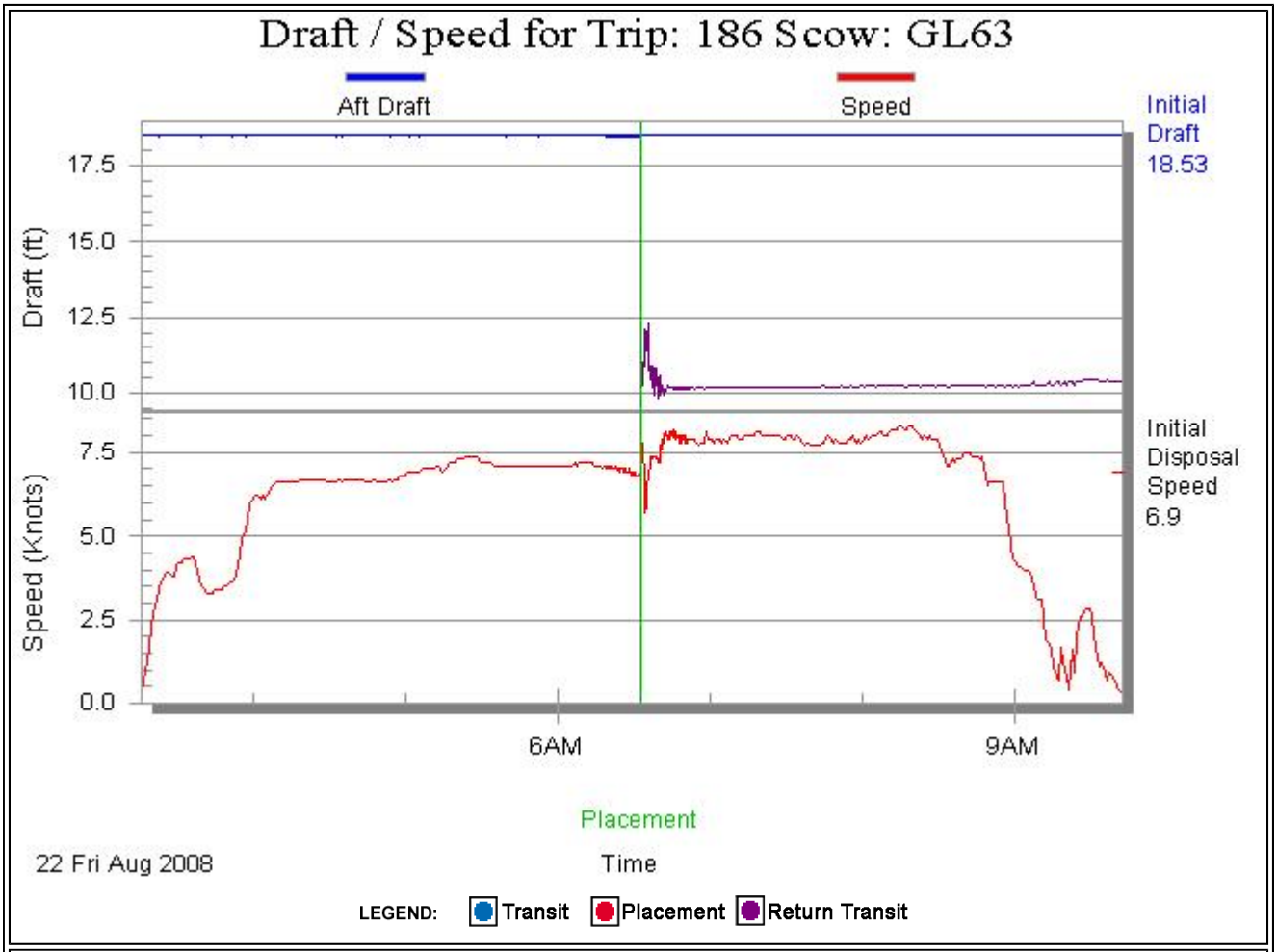


Trip Information

Trip #:	186
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/22/2008 03:15:35
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/22/2008 06:32:24
Latitude:	42.429848
Longitude:	-70.581981
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/22/2008 06:32:37
Latitude:	42.429987
Longitude:	-70.581423
Aft Draft:	10.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082208_122645

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

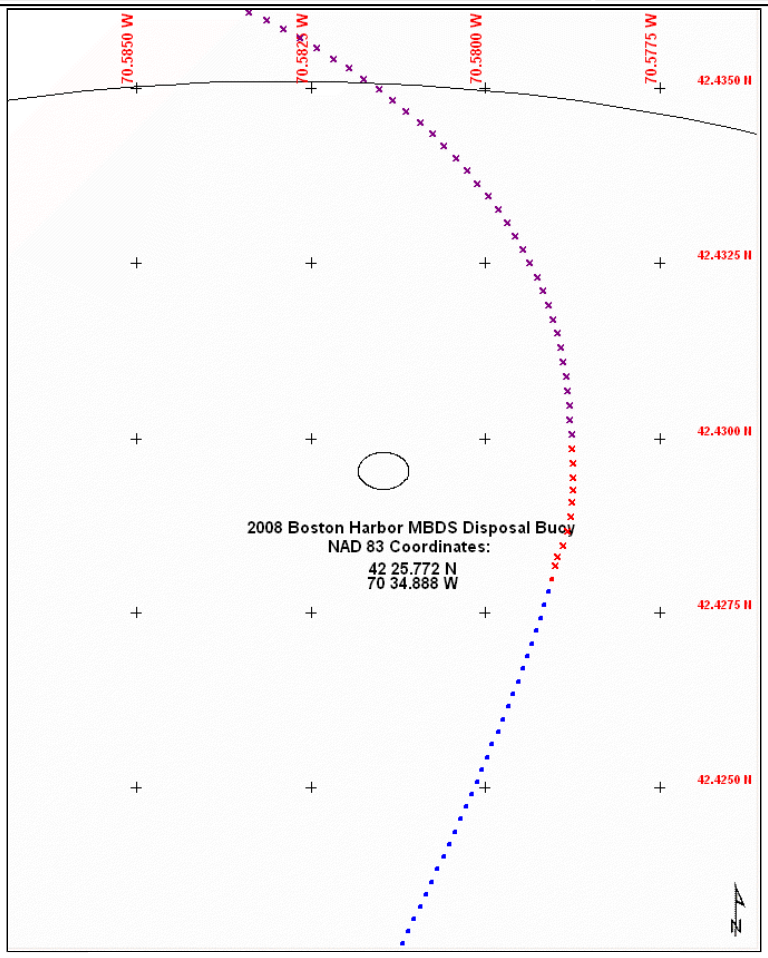
Trip #:	187
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/22/2008 10:47:27
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/22/2008 14:34:21	**Time:**	8/22/2008 14:35:16
Lat:	42.427979	**Lat:**	42.429844
Long:	-70.579055	**Long:**	-70.578755
Aft Draft:	20.40 ft	**Aft Draft:**	6.81 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/22/2008 1:45:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082508_113050

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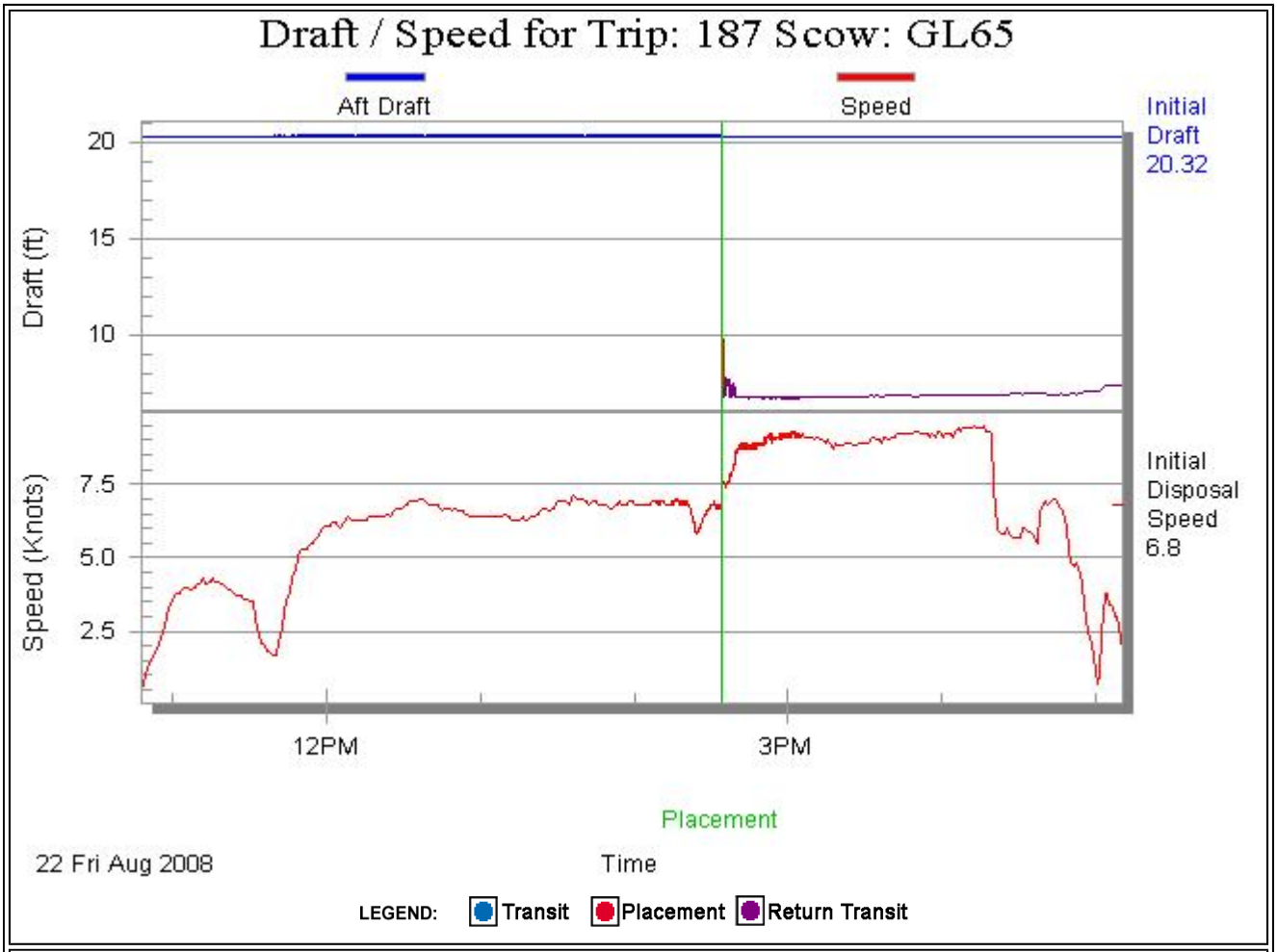


Trip Information

Trip #:	187
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/22/2008 10:47:27
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	8/22/2008 14:34:21	**Time:**	8/22/2008 14:35:16
Latitude:	42.427979	**Latitude:**	42.429844
Longitude:	-70.579055	**Longitude:**	-70.578755
Aft Draft:	20.40 ft	**Aft Draft:**	6.81 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_113050

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	188
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/22/2008 22:39:20
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

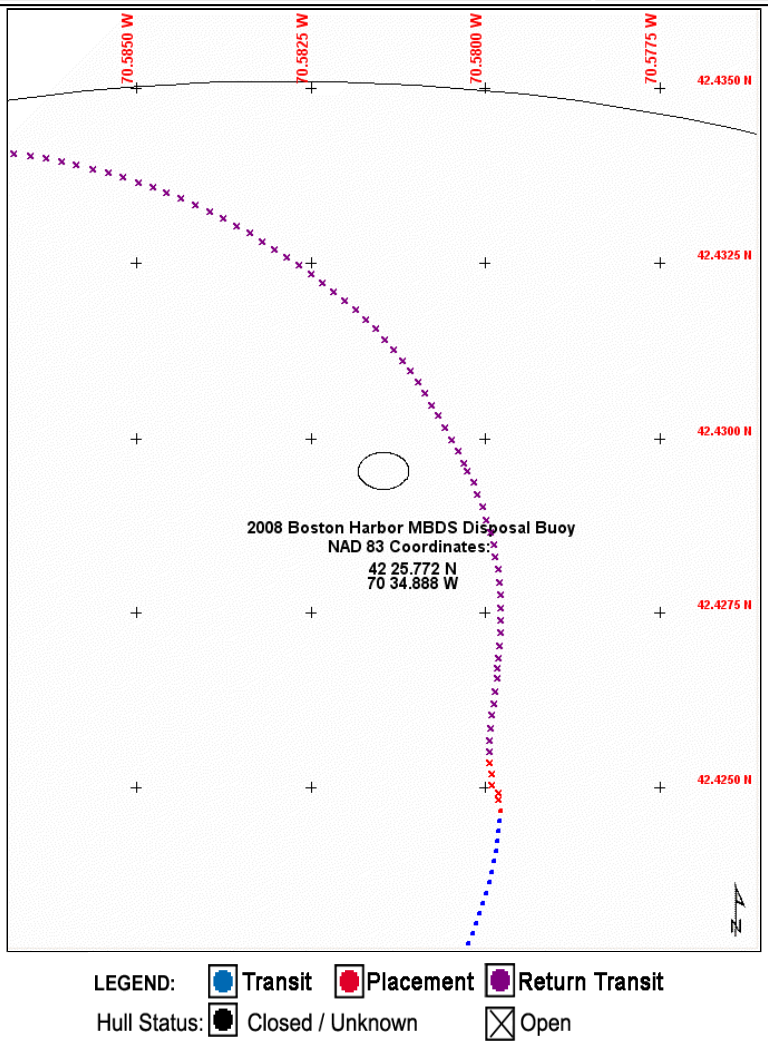
Placement Start:		**Placement End:**	
Time:	8/23/2008 02:02:12	**Time:**	8/23/2008 02:02:39
Lat:	42.424671	**Lat:**	42.425344
Long:	-70.579789	**Long:**	-70.579936
Aft Draft:	18.53 ft	**Aft Draft:**	10.91 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/22/2008 10:12:00 PM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_143451

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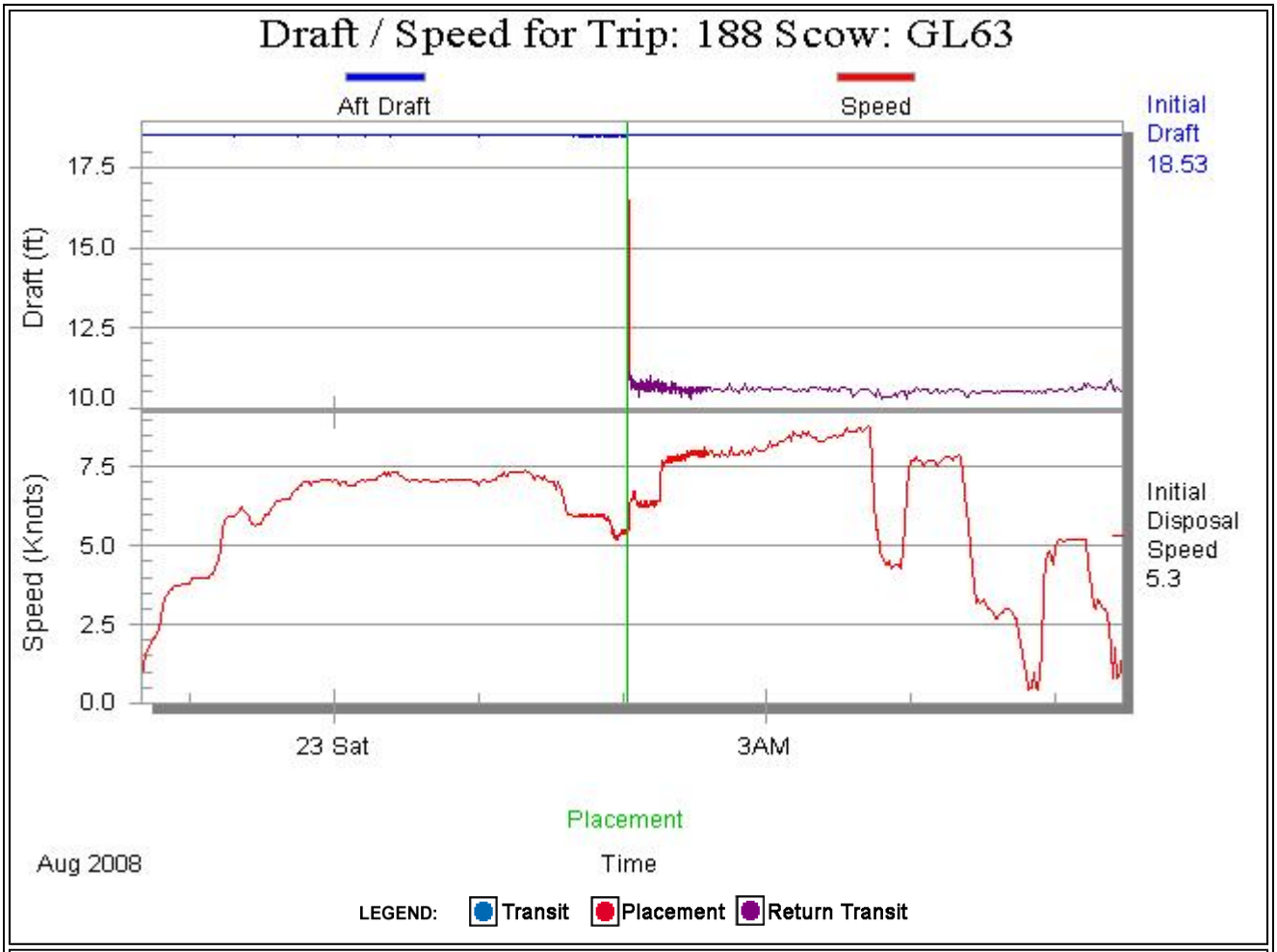


Trip Information

Trip #:	188
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/22/2008 22:39:20
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/23/2008 02:02:12
Latitude:	42.424671
Longitude:	-70.579789
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/23/2008 02:02:39
Latitude:	42.425344
Longitude:	-70.579936
Aft Draft:	10.91 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_143451

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

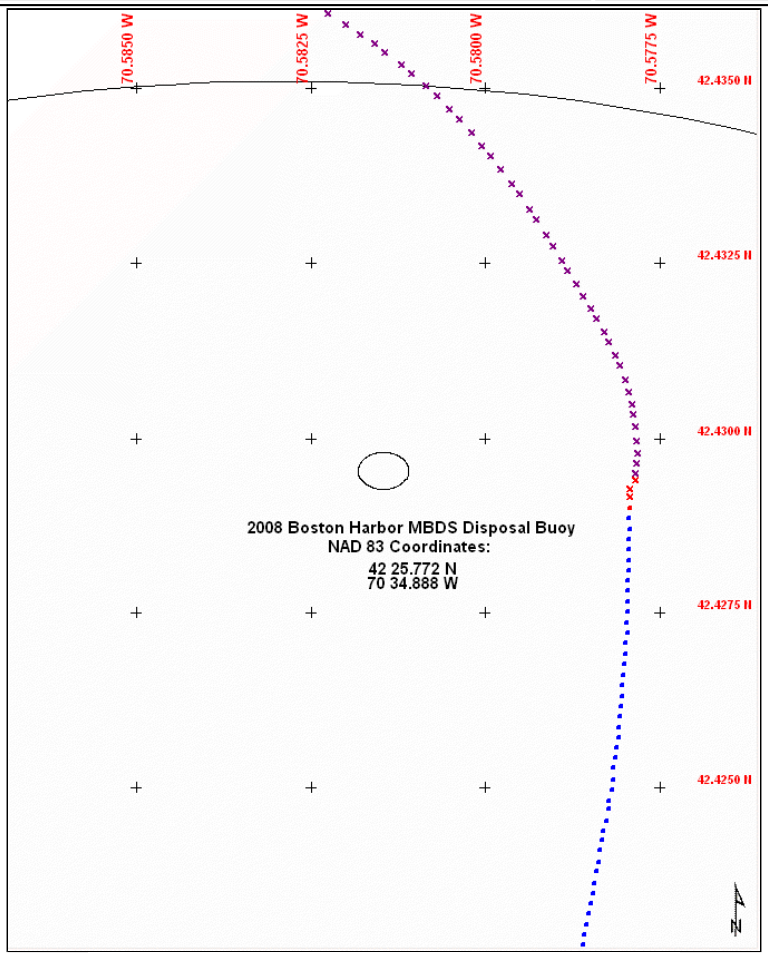
Trip #:	189
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/23/2008 06:07:39
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/23/2008 09:29:20	**Time:**	8/23/2008 09:29:35
Lat:	42.428998	**Lat:**	42.429394
Long:	-70.577938	**Long:**	-70.577859
Aft Draft:	20.32 ft	**Aft Draft:**	8.59 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/23/2008 5:07:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082508_113111

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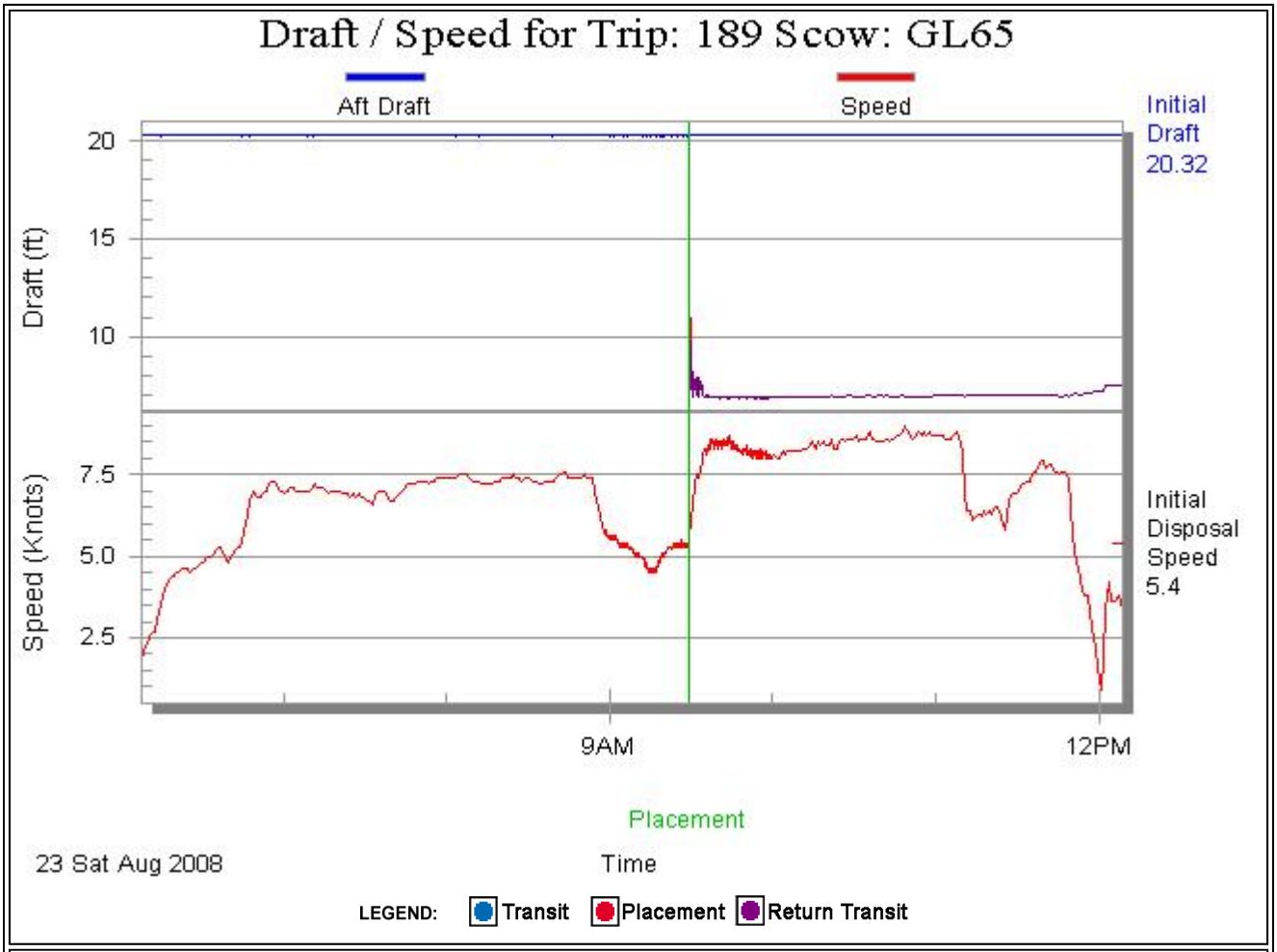


Trip Information

Trip #:	189
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/23/2008 06:07:39
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	8/23/2008 09:29:20	**Time:**	8/23/2008 09:29:35
Latitude:	42.428998	**Latitude:**	42.429394
Longitude:	-70.577938	**Longitude:**	-70.577859
Aft Draft:	20.32 ft	**Aft Draft:**	8.59 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_113111

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

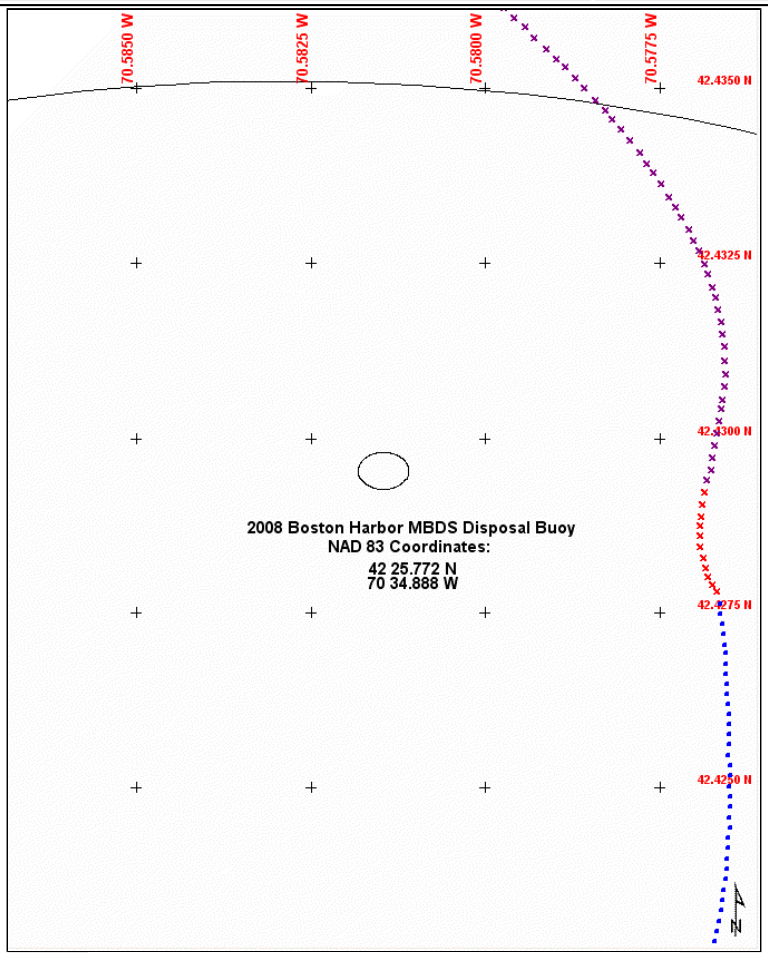
Trip #:	190
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/23/2008 21:31:02
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/24/2008 01:02:12	**Time:**	8/24/2008 01:03:05
Lat:	42.427797	**Lat:**	42.429217
Long:	-70.576696	**Long:**	-70.576874
Aft Draft:	18.53 ft	**Aft Draft:**	10.83 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/23/2008 8:30:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082508_143510

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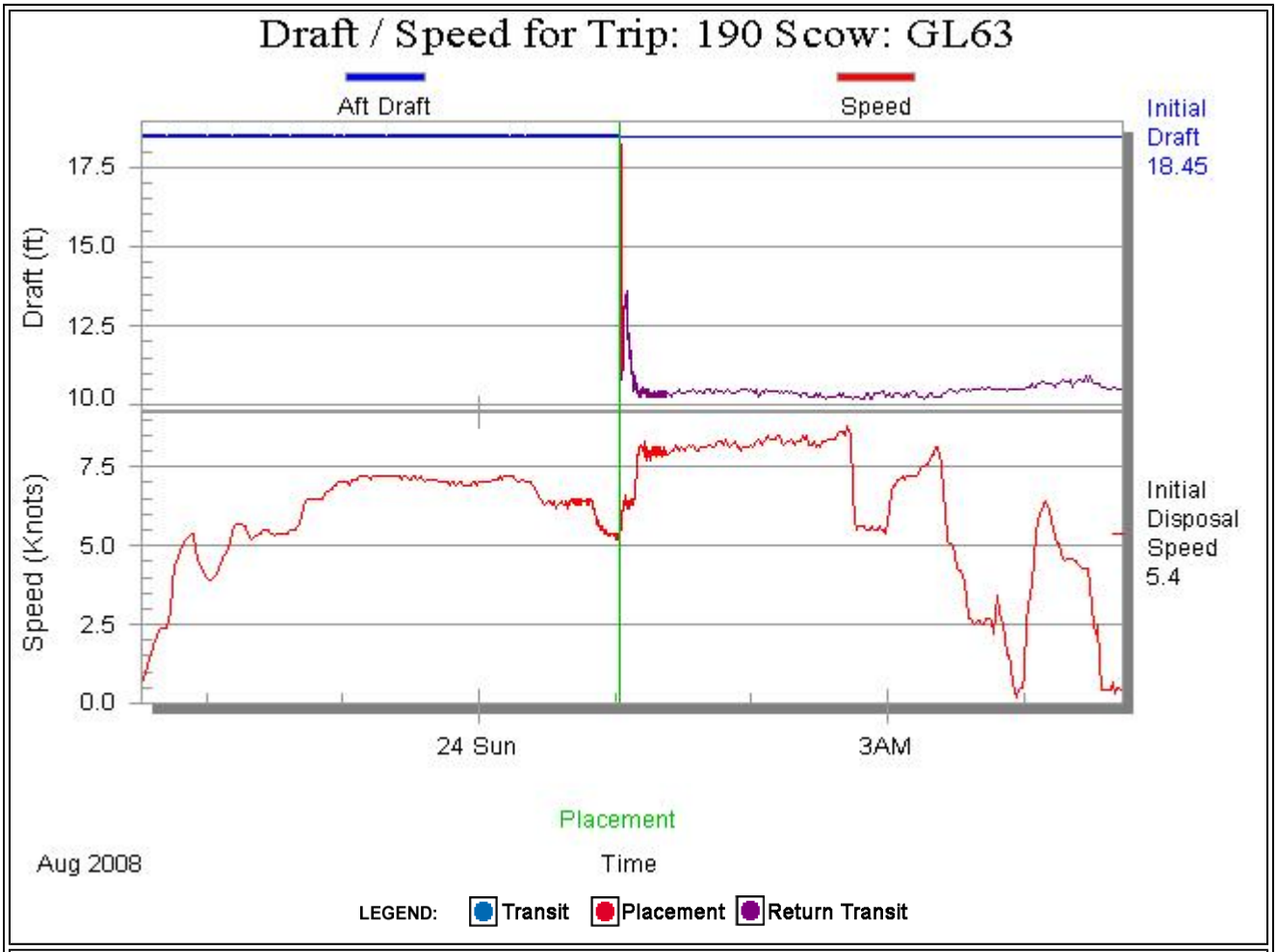


Trip Information

Trip #:	190
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/23/2008 21:31:02
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/24/2008 01:02:12
Latitude:	42.427797
Longitude:	-70.576696
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/24/2008 01:03:05
Latitude:	42.429217
Longitude:	-70.576874
Aft Draft:	10.83 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_143510

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

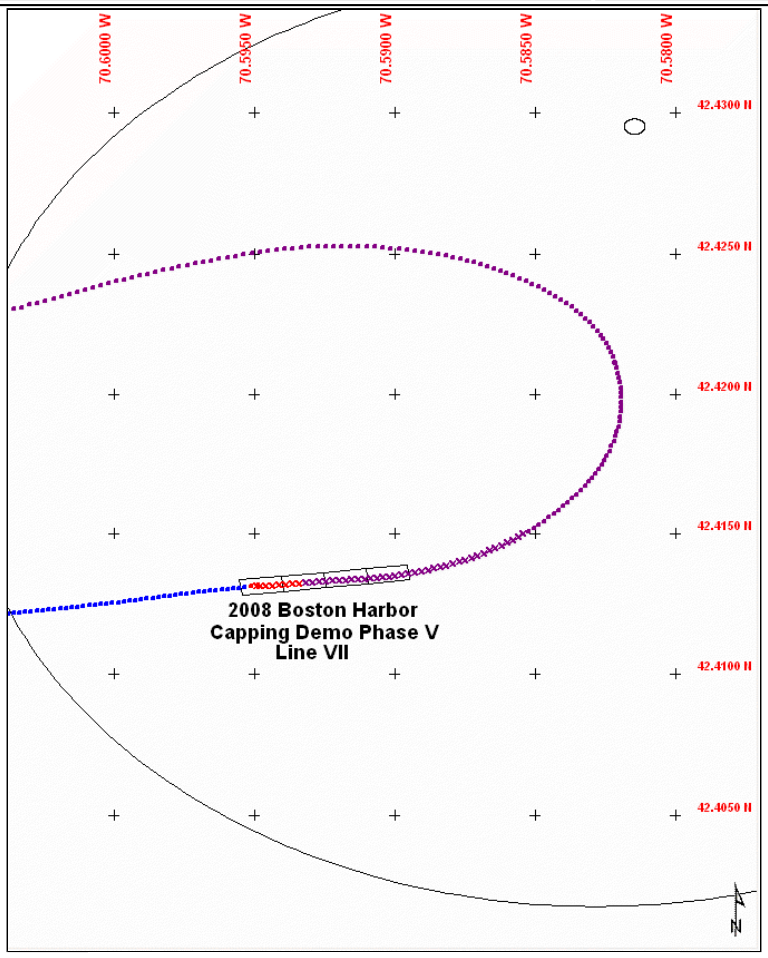
Trip #:	191
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/24/2008 05:25:38
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/24/2008 08:57:26	**Time:**	8/24/2008 08:58:11
Lat:	42.413129	**Lat:**	42.413229
Long:	-70.595150	**Long:**	-70.593432
Aft Draft:	20.32 ft	**Aft Draft:**	7.92 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/24/2008 6:12:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082508_114341

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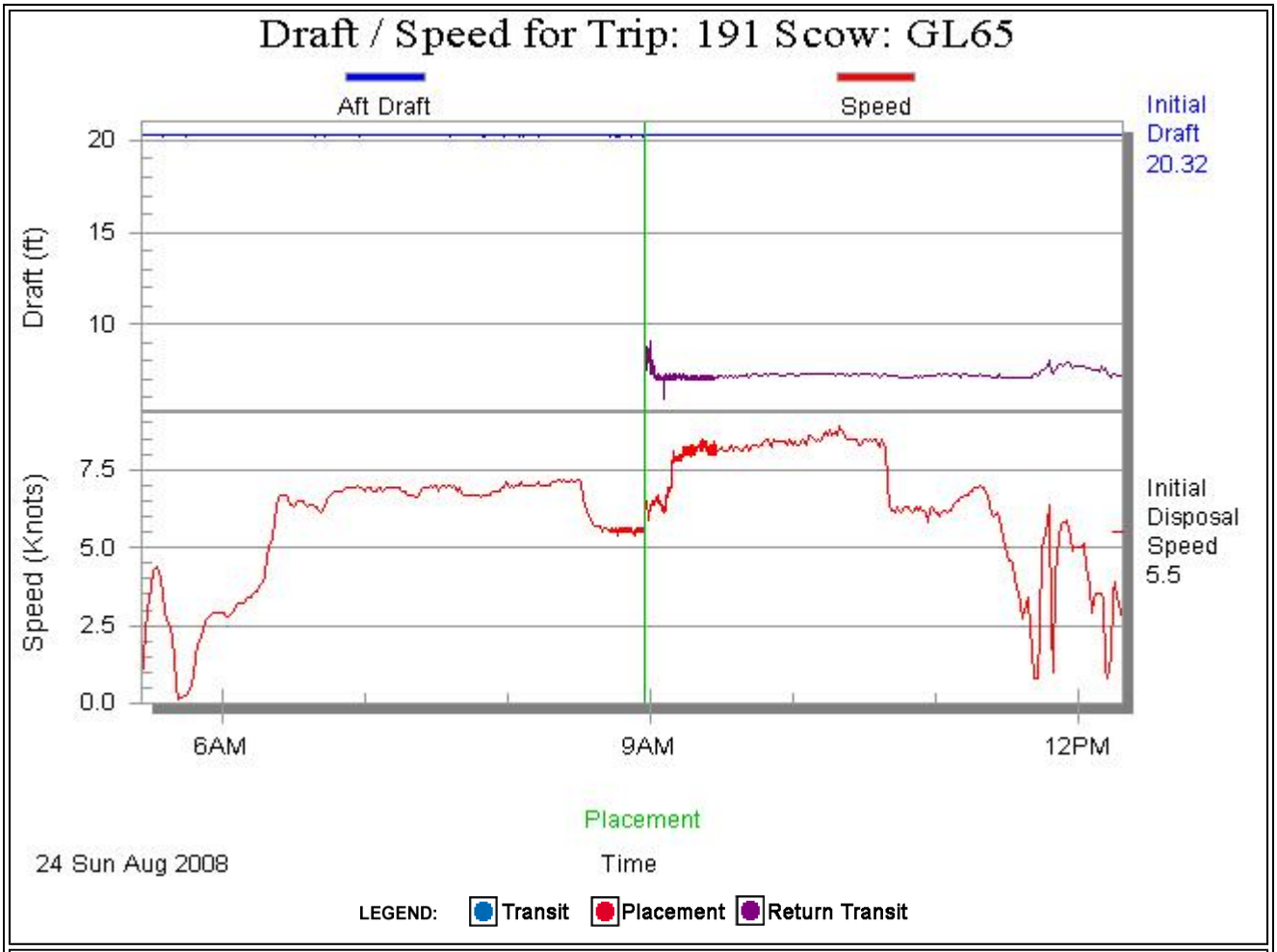


Trip Information

Trip #:	191
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/24/2008 05:25:38
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/24/2008 08:57:26
Latitude:	42.413129
Longitude:	-70.595150
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/24/2008 08:58:11
Latitude:	42.413229
Longitude:	-70.593432
Aft Draft:	7.92 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_114341

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

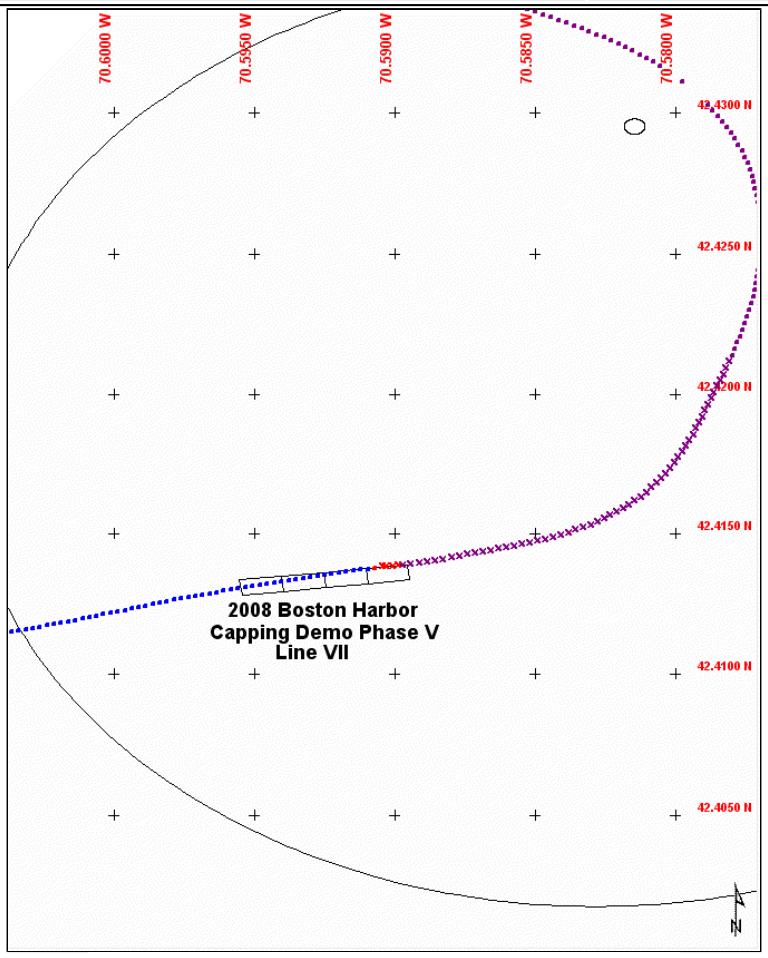
Trip #:	192
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/24/2008 12:46:26
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/24/2008 16:20:17	**Time:**	8/24/2008 16:20:36
Lat:	42.413795	**Lat:**	42.413882
Long:	-70.590732	**Long:**	-70.589885
Aft Draft:	18.61 ft	**Aft Draft:**	11.63 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/24/2008 12:05:00 PM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082508_143135

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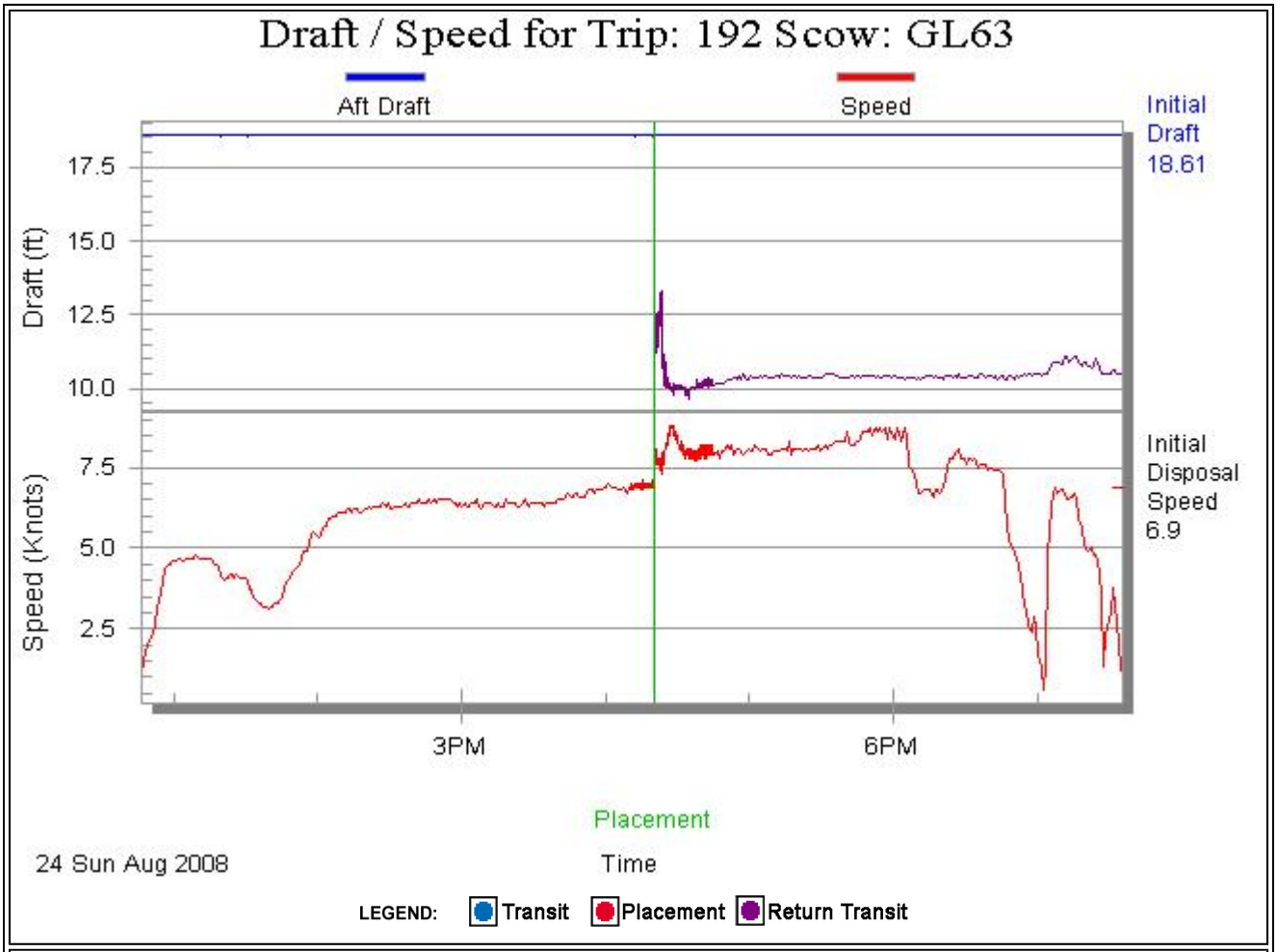


Trip Information

Trip #:	192
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/24/2008 12:46:26
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/24/2008 16:20:17
Latitude:	42.413795
Longitude:	-70.590732
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/24/2008 16:20:36
Latitude:	42.413882
Longitude:	-70.589885
Aft Draft:	11.63 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_143135

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

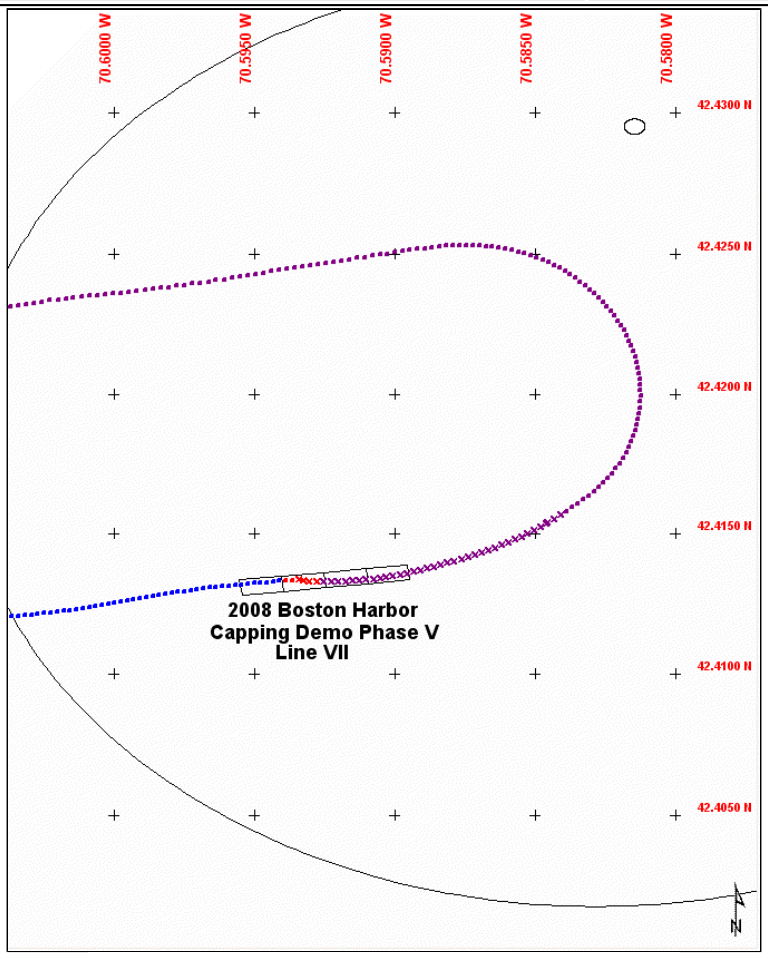
Trip #:	193
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/24/2008 19:59:44
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/24/2008 23:01:56	**Time:**	8/24/2008 23:02:23
Lat:	42.413349	**Lat:**	42.413296
Long:	-70.593894	**Long:**	-70.592802
Aft Draft:	20.32 ft	**Aft Draft:**	7.33 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/24/2008 7:27:00 PM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082508_143150

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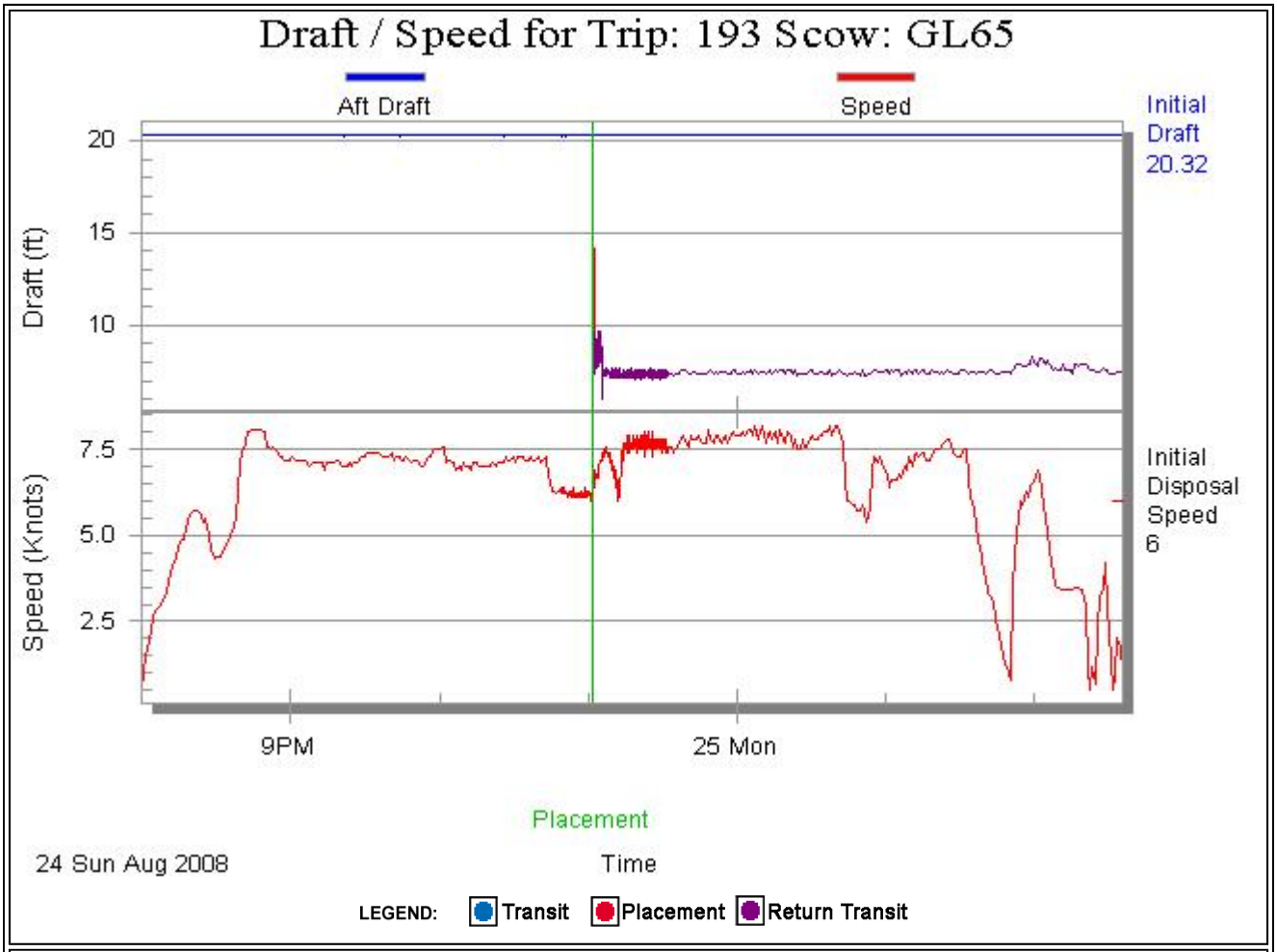


Trip Information

Trip #:	193
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/24/2008 19:59:44
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/24/2008 23:01:56
Latitude:	42.413349
Longitude:	-70.593894
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/24/2008 23:02:23
Latitude:	42.413296
Longitude:	-70.592802
Aft Draft:	7.33 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_143150

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

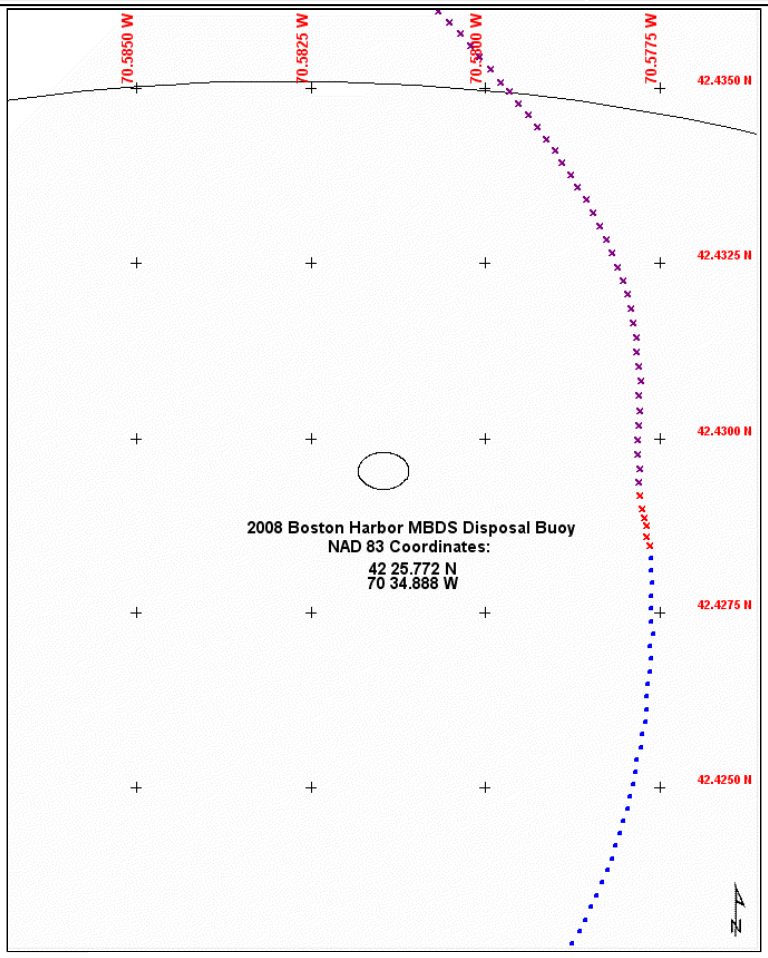
Trip #:	194
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/25/2008 03:13:37
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/25/2008 07:12:17	**Time:**	8/25/2008 07:12:40
Lat:	42.428457	**Lat:**	42.429164
Long:	-70.577641	**Long:**	-70.577792
Aft Draft:	18.53 ft	**Aft Draft:**	10.44 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/25/2008 2:51:00 AM (Local)
Wave Height: 0.0 ft **Dominant Wave Period:** 0.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082508_143528

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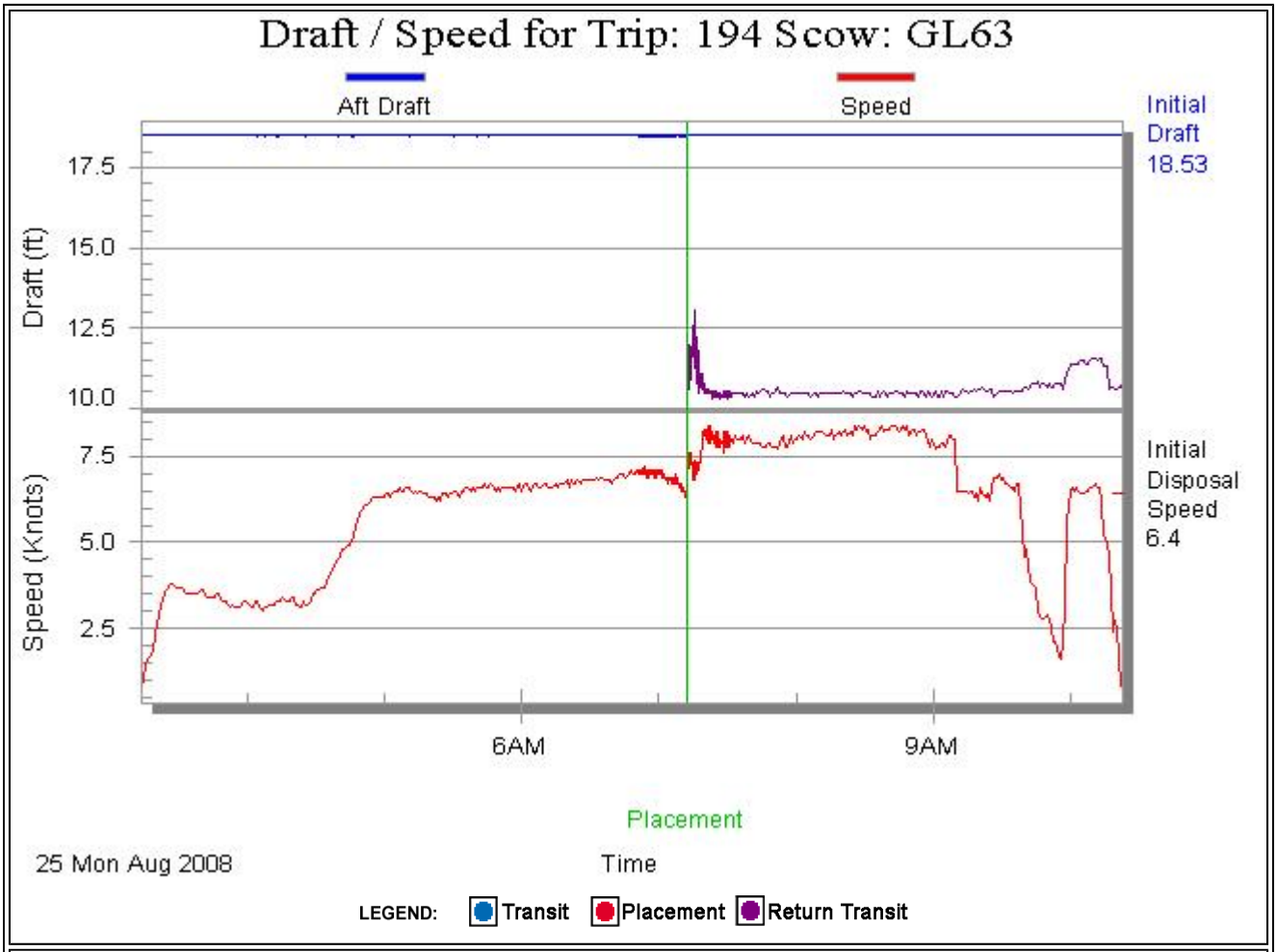


Trip Information

Trip #:	194
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/25/2008 03:13:37
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/25/2008 07:12:17
Latitude:	42.428457
Longitude:	-70.577641
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/25/2008 07:12:40
Latitude:	42.429164
Longitude:	-70.577792
Aft Draft:	10.44 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082508_143528

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

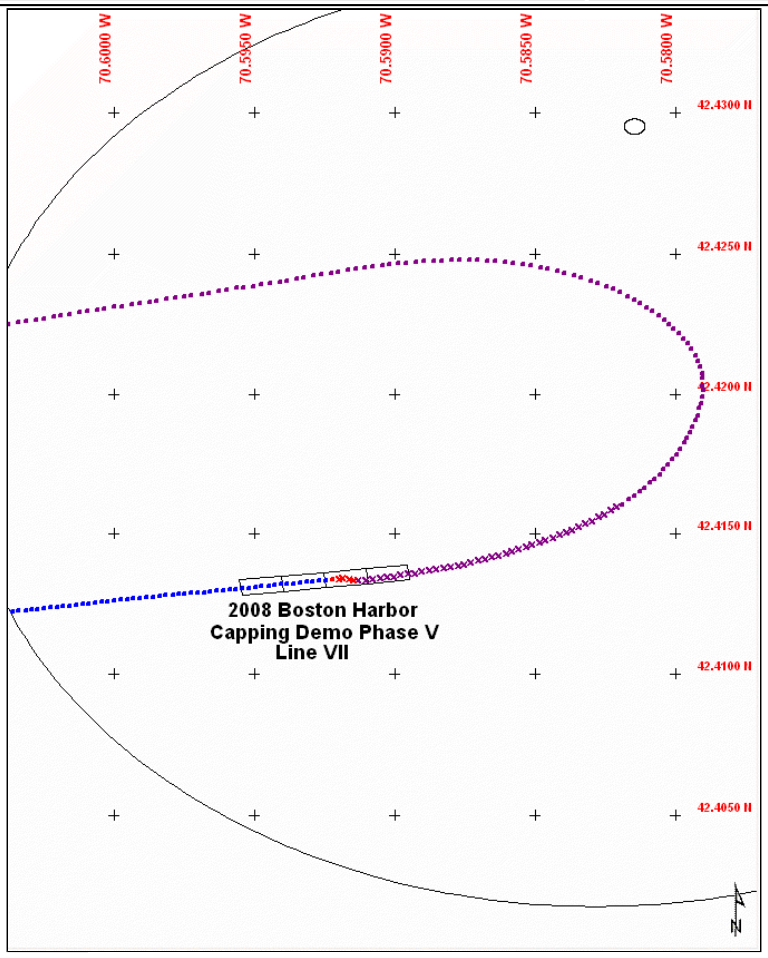
Trip #:	195
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/25/2008 10:07:46
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/25/2008 13:47:01	**Time:**	8/25/2008 13:47:20
Lat:	42.413370	**Lat:**	42.413351
Long:	-70.592248	**Long:**	-70.591485
Aft Draft:	20.40 ft	**Aft Draft:**	7.85 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/25/2008 10:25:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082608_100254

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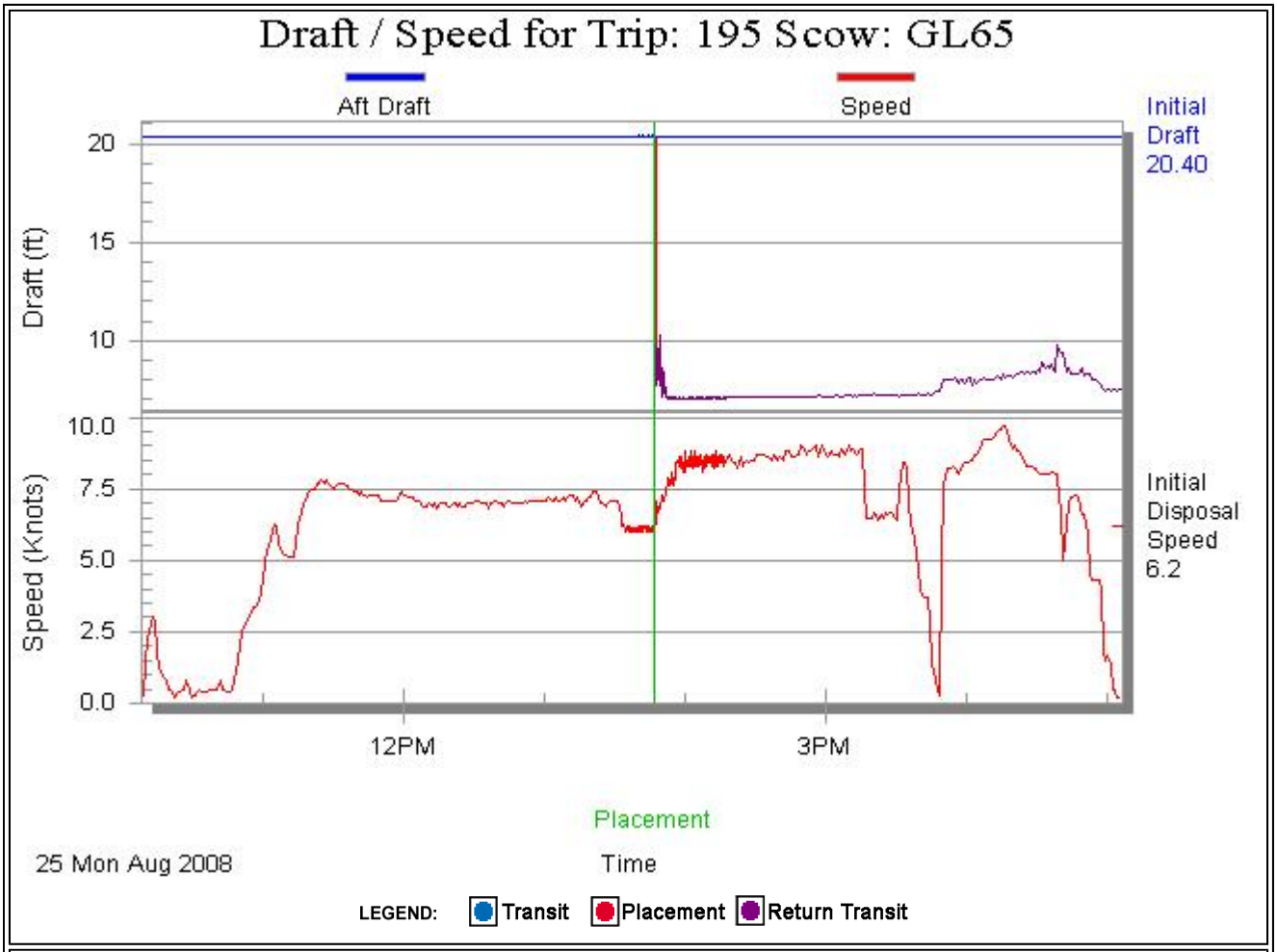


Trip Information

Trip #:	195
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/25/2008 10:07:46
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/25/2008 13:47:01
Latitude:	42.413370
Longitude:	-70.592248
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/25/2008 13:47:20
Latitude:	42.413351
Longitude:	-70.591485
Aft Draft:	7.85 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082608_100254

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

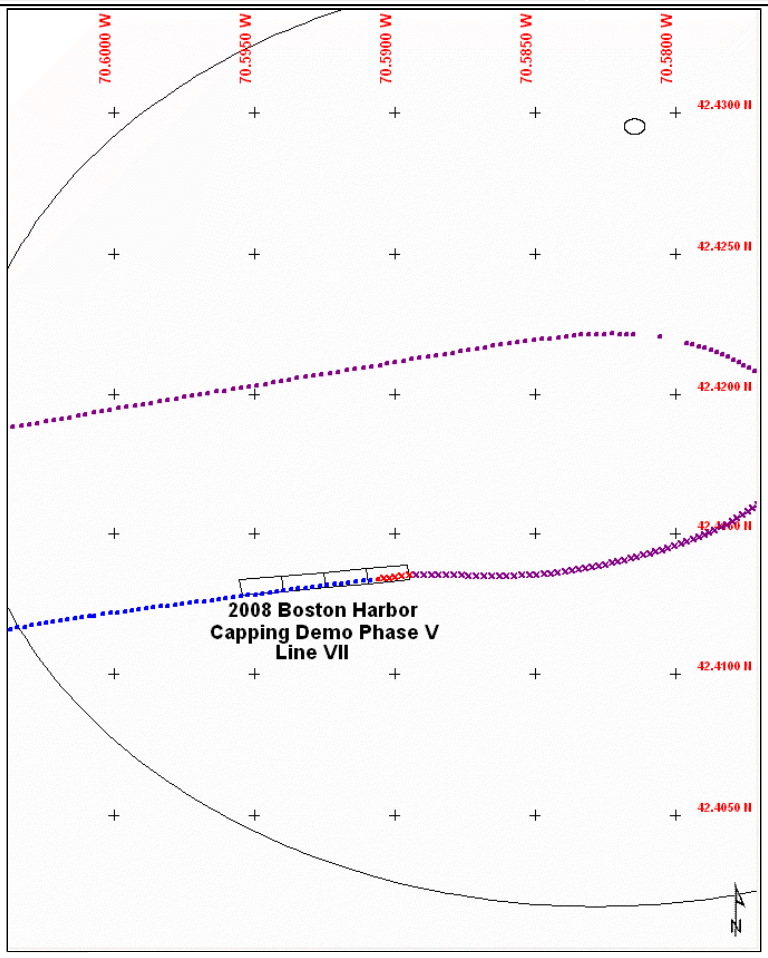
Trip #:	196
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	3900 cu yd
Start Time:	8/25/2008 18:49:19
Init Aft Draft:	17.74 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/25/2008 21:30:29	**Time:**	8/25/2008 21:30:56
Lat:	42.413391	**Lat:**	42.413533
Long:	-70.590633	**Long:**	-70.589477
Aft Draft:	17.50 ft	**Aft Draft:**	11.63 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/25/2008 6:40:00 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 082608_100610

ADISS Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
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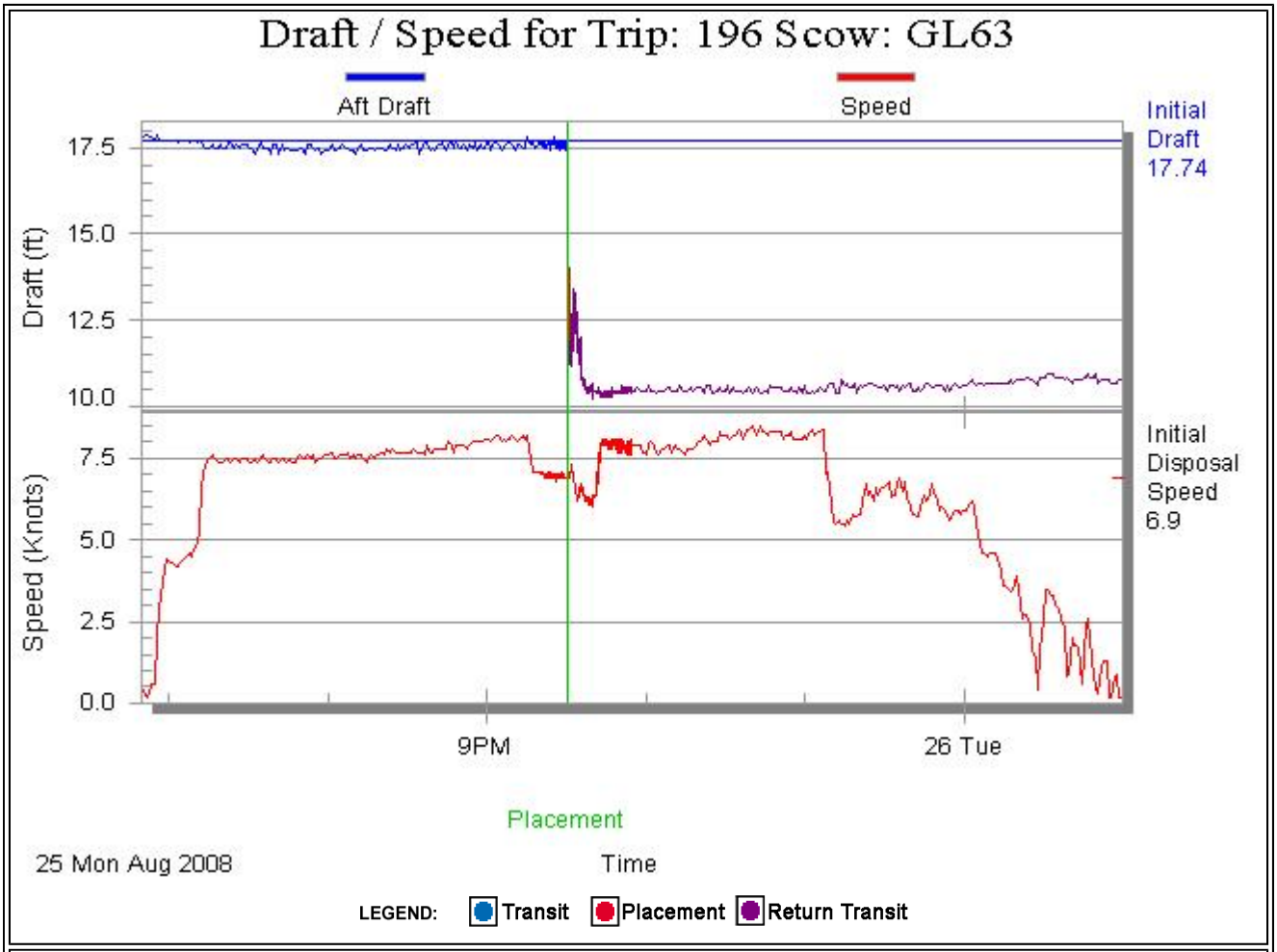


Trip Information

Trip #:	196
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	3900 cu yd
Start Time:	8/25/2008 18:49:19
Init Aft Draft:	17.74 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/25/2008 21:30:29
Latitude:	42.413391
Longitude:	-70.590633
Aft Draft:	17.50 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/25/2008 21:30:56
Latitude:	42.413533
Longitude:	-70.589477
Aft Draft:	11.63 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082608_100610

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

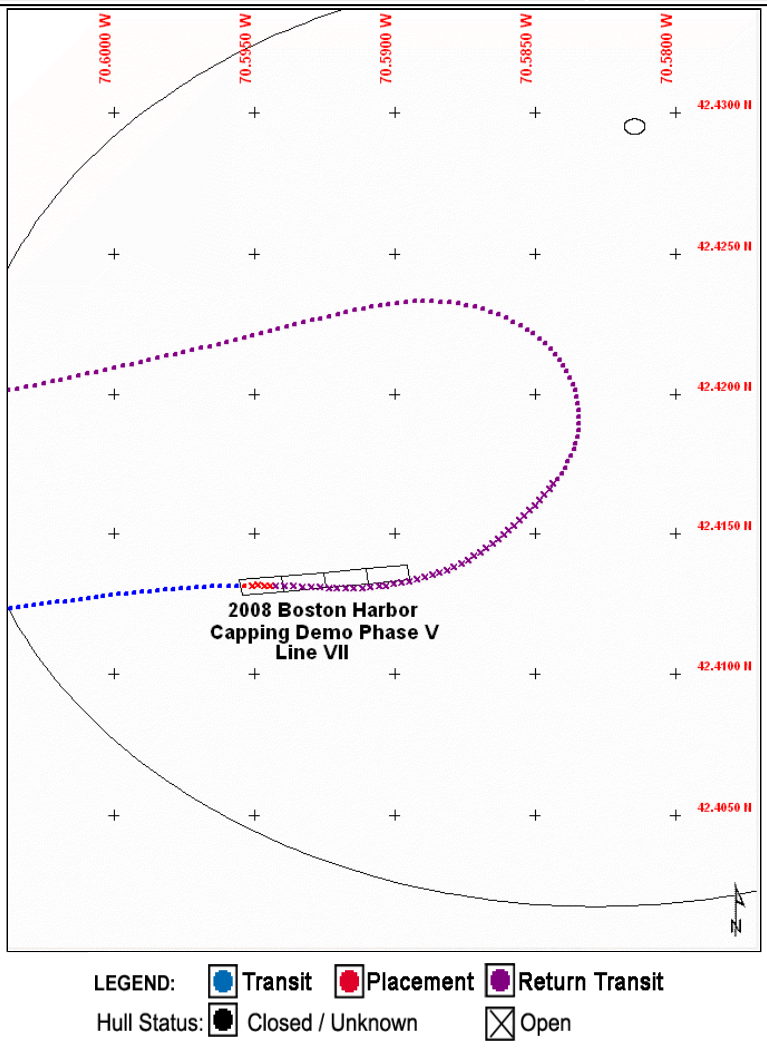
Trip #:	197
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	8/27/2008 23:20:07
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/28/2008 02:08:24	**Time:**	8/28/2008 02:08:43
Lat:	42.413156	**Lat:**	42.413146
Long:	-70.595376	**Long:**	-70.594456
Aft Draft:	20.32 ft	**Aft Draft:**	8.22 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/27/2008 11:20:07 PM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

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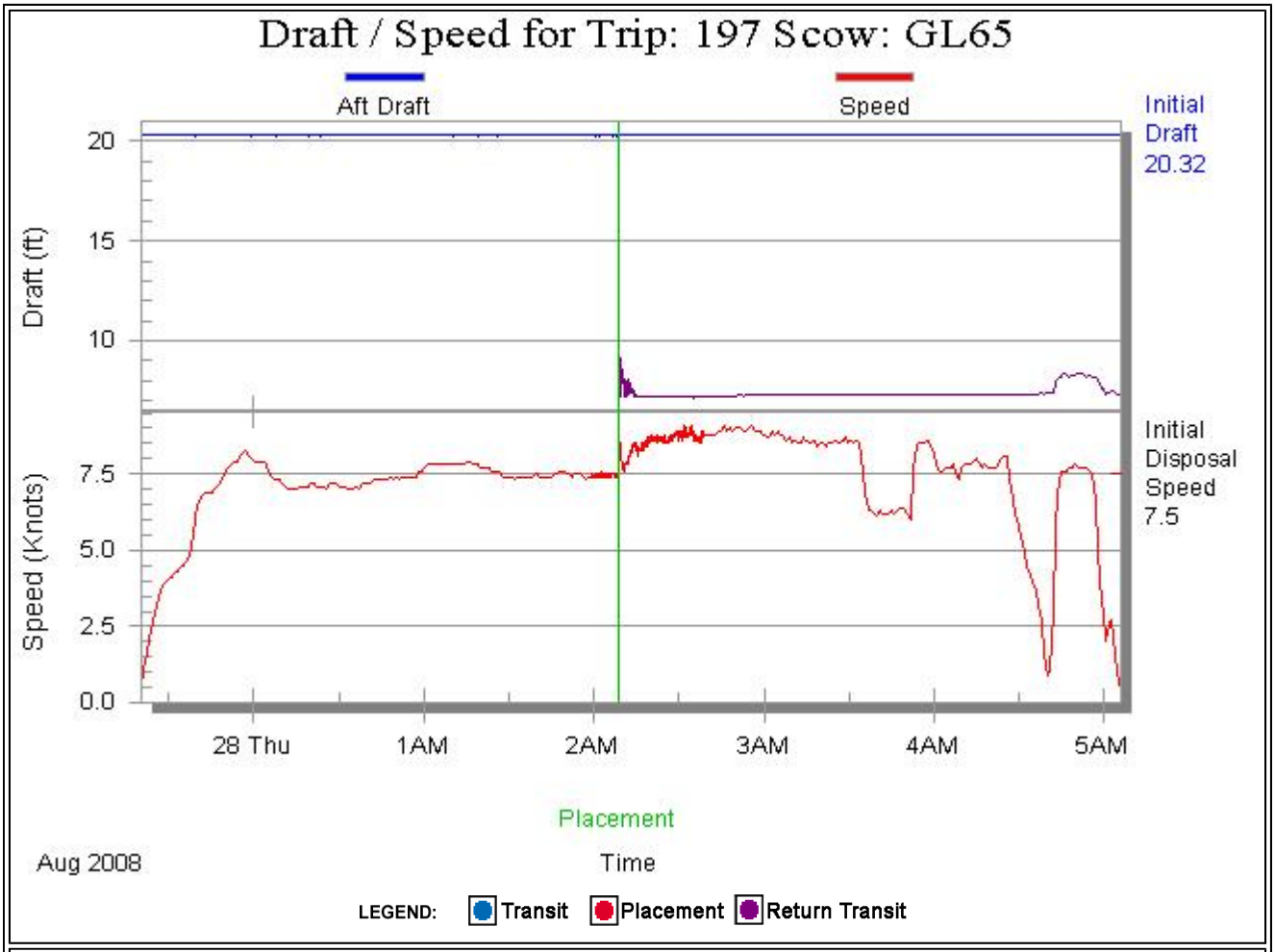


Trip Information

Trip #:	197
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	8/27/2008 23:20:07
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/28/2008 02:08:24
Latitude:	42.413156
Longitude:	-70.595376
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/28/2008 02:08:43
Latitude:	42.413146
Longitude:	-70.594456
Aft Draft:	8.22 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082908_115357

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

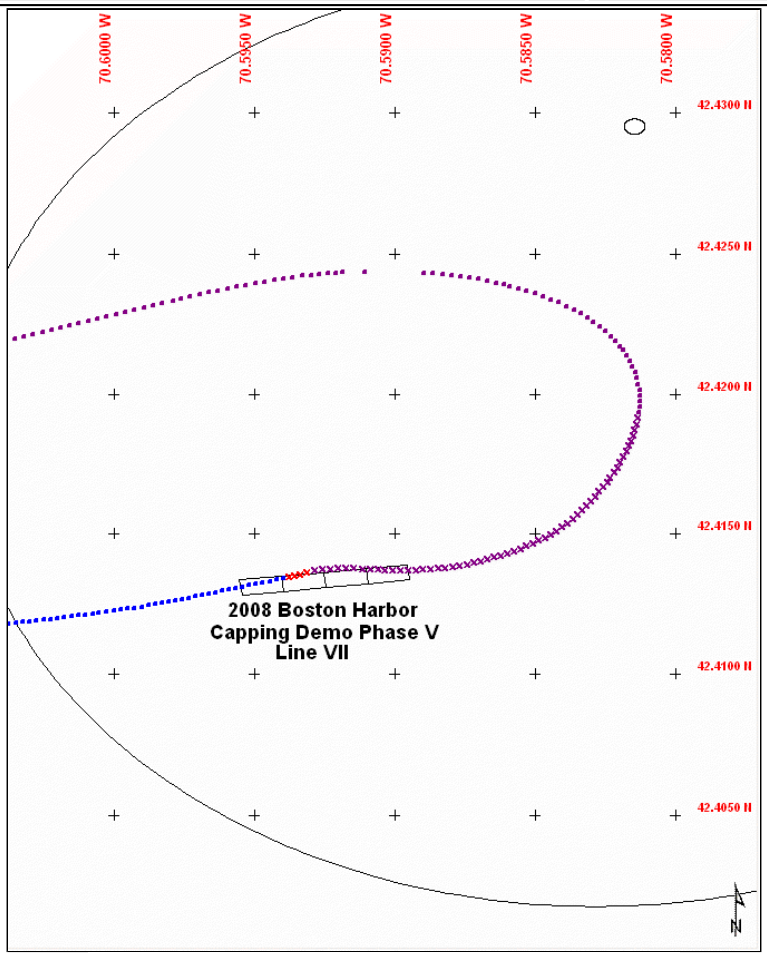
Trip #:	198
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/28/2008 05:28:58
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/28/2008 09:02:52	**Time:**	8/28/2008 09:03:07
Lat:	42.413471	**Lat:**	42.413613
Long:	-70.593764	**Long:**	-70.593135
Aft Draft:	18.53 ft	**Aft Draft:**	11.78 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/28/2008 5:05:00 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

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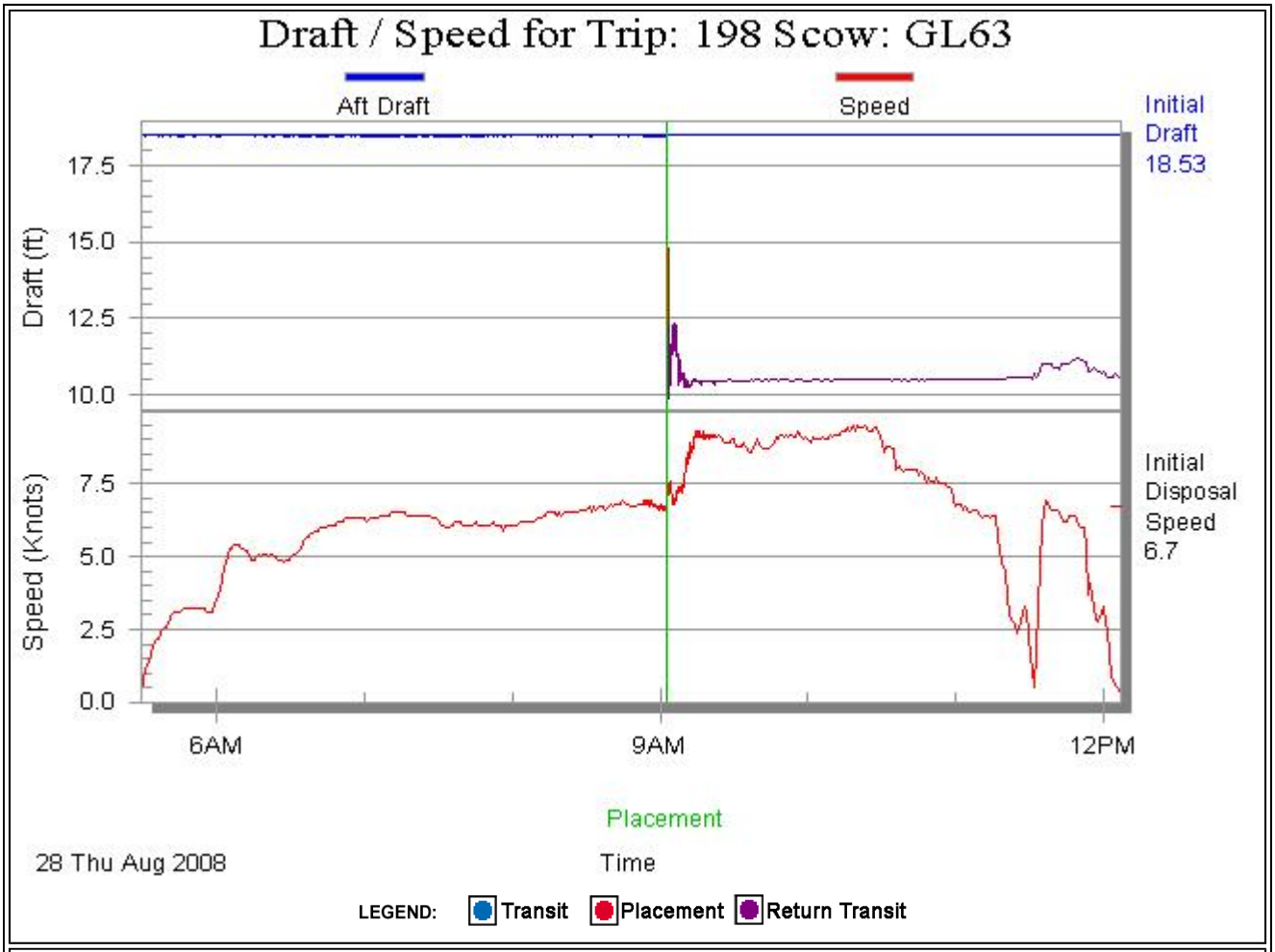


Trip Information

Trip #:	198
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	8/28/2008 05:28:58
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/28/2008 09:02:52	**Time:**	8/28/2008 09:03:07
Latitude:	42.413471	**Latitude:**	42.413613
Longitude:	-70.593764	**Longitude:**	-70.593135
Aft Draft:	18.53 ft	**Aft Draft:**	11.78 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082908_115341

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

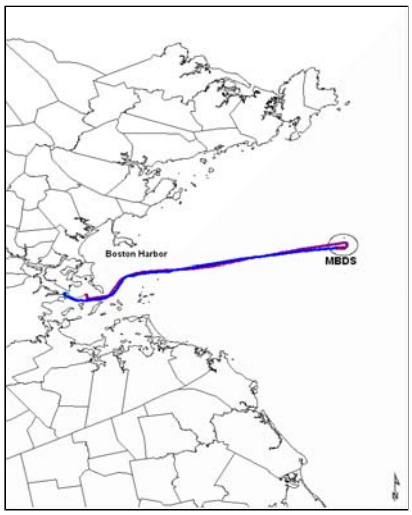
Trip Information:

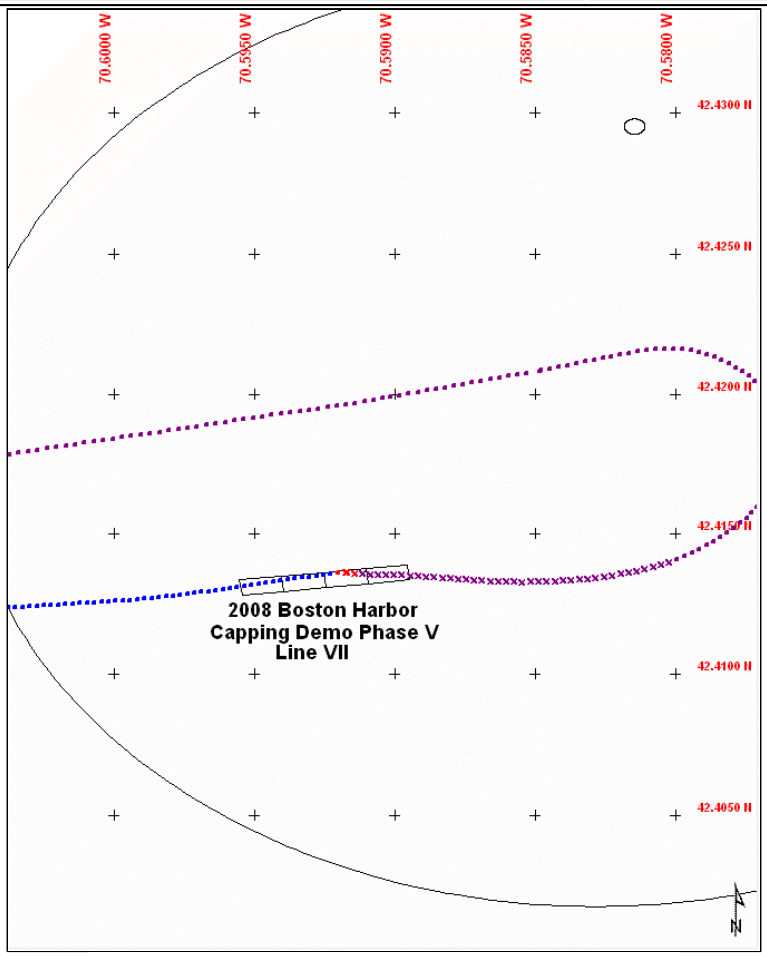
Trip #:	199
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/28/2008 11:38:02
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	8/28/2008 15:30:00	8/28/2008 15:30:13
Lat:	42.413603	42.413581
Long:	-70.592043	-70.591449
Aft Draft:	20.40 ft	8.29 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/28/2008 11:59:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

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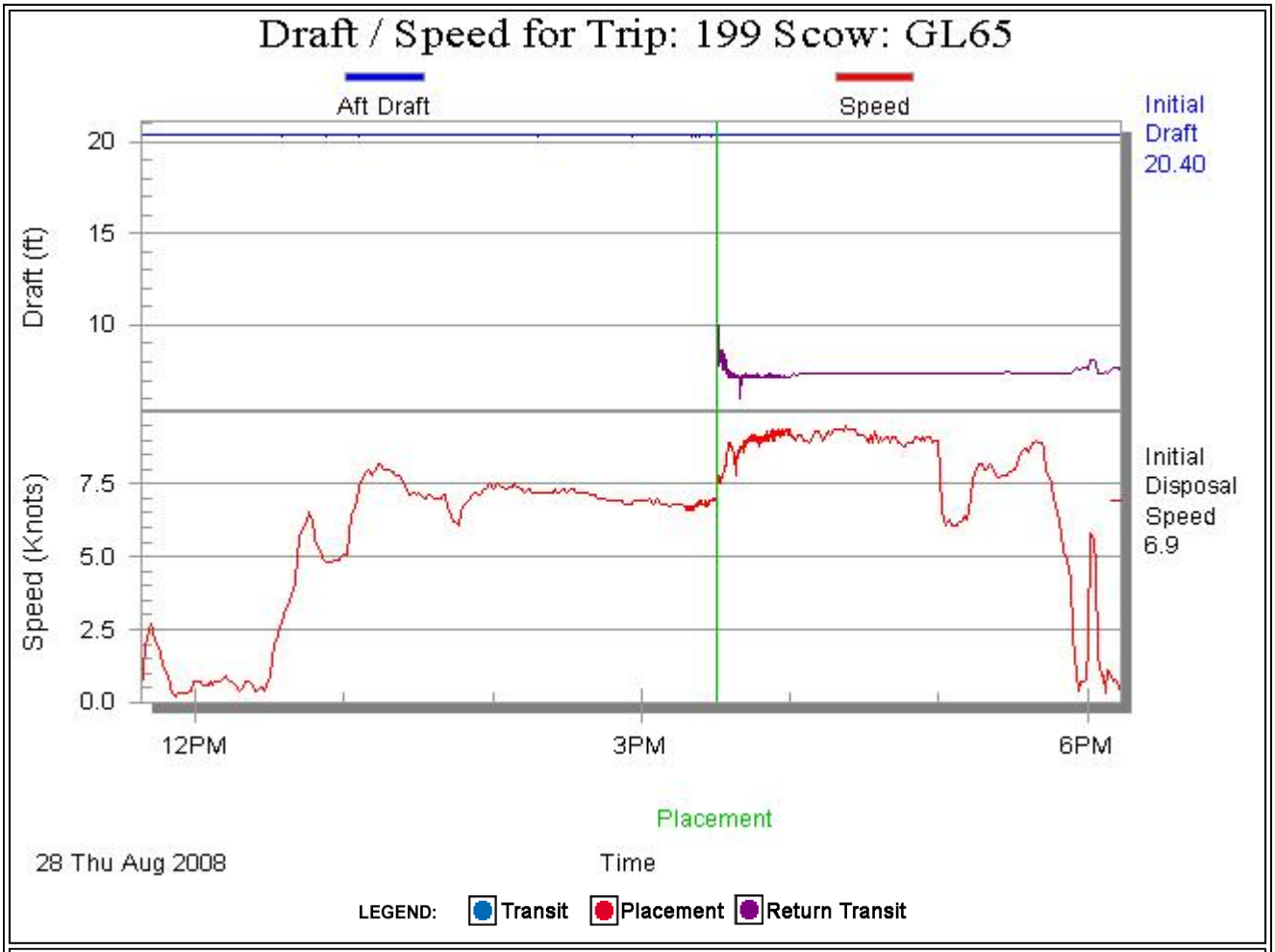


Trip Information

Trip #:	199
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/28/2008 11:38:02
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/28/2008 15:30:00	**Time:**	8/28/2008 15:30:13
Latitude:	42.413603	**Latitude:**	42.413581
Longitude:	-70.592043	**Longitude:**	-70.591449
Aft Draft:	20.40 ft	**Aft Draft:**	8.29 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082908_115122

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

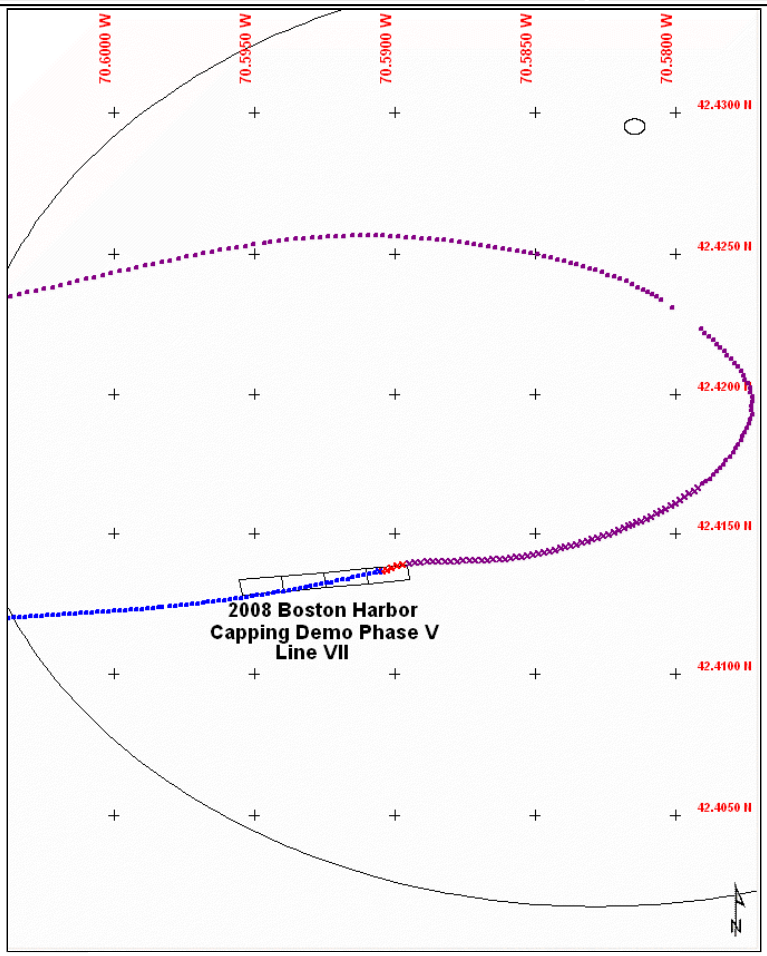
Trip #:	200
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/28/2008 19:40:06
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	8/29/2008 00:04:20	8/29/2008 00:04:43
Lat:	42.413682	42.413894
Long:	-70.590441	-70.589692
Aft Draft:	18.45 ft	11.78 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/28/2008 7:20:00 PM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

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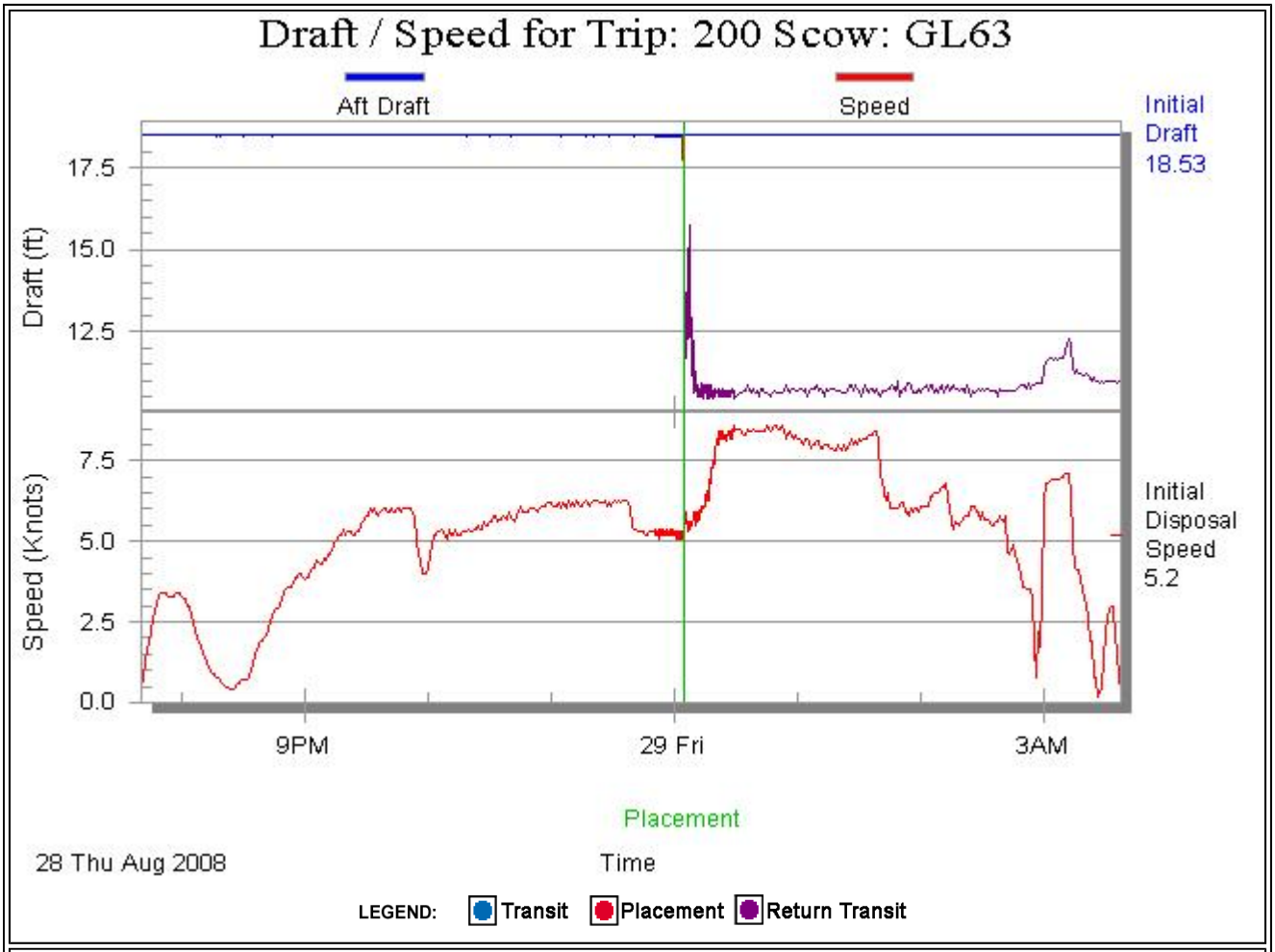


Trip Information

Trip #:	200
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/28/2008 19:40:06
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/29/2008 00:04:20	**Time:**	8/29/2008 00:04:43
Latitude:	42.413682	**Latitude:**	42.413894
Longitude:	-70.590441	**Longitude:**	-70.589692
Aft Draft:	18.45 ft	**Aft Draft:**	11.78 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082908_114807

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

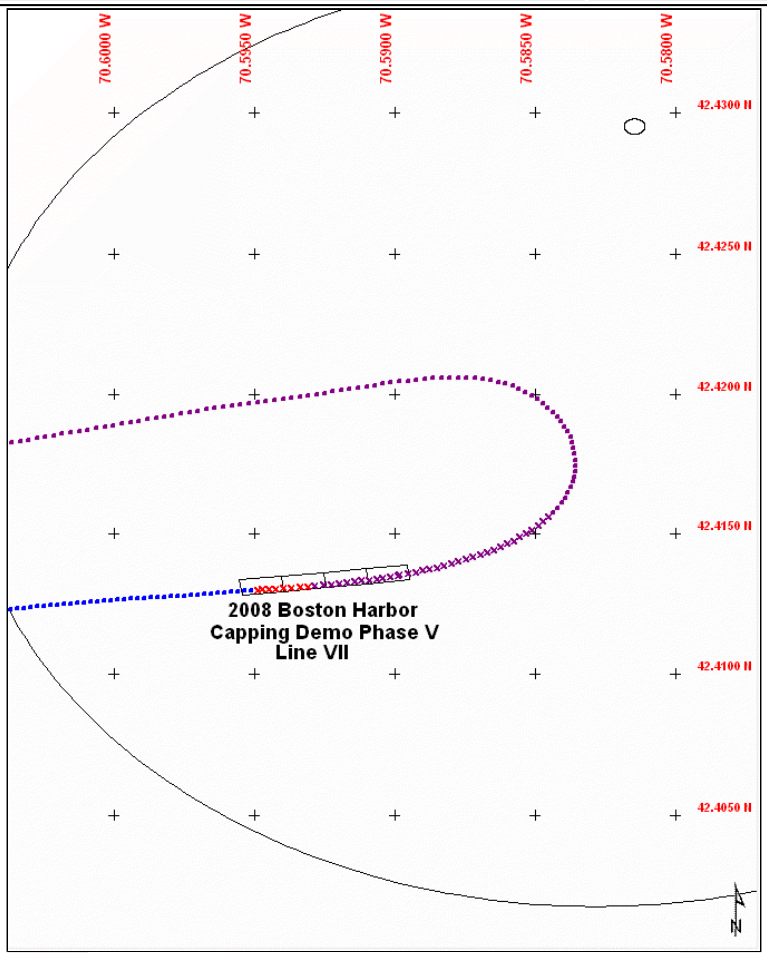
Trip #:	201
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/29/2008 04:09:18
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	8/29/2008 07:38:30	8/29/2008 07:39:09
Lat:	42.413007	42.413119
Long:	-70.594895	-70.593128
Aft Draft:	20.32 ft	7.77 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/29/2008 4:04:00 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

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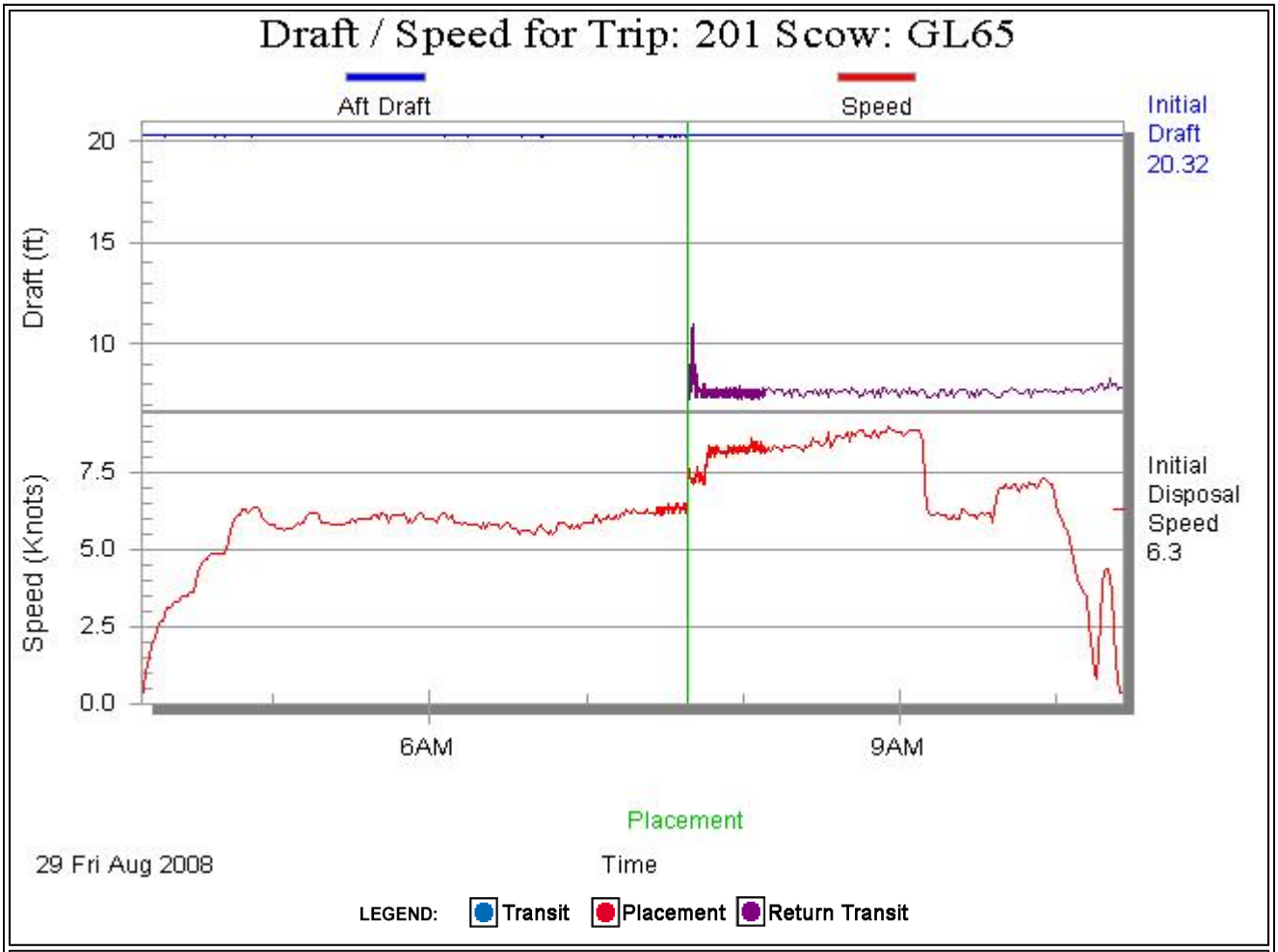


Trip Information

Trip #:	201
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/29/2008 04:09:18
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	8/29/2008 07:38:30	**Time:**	8/29/2008 07:39:09
Latitude:	42.413007	**Latitude:**	42.413119
Longitude:	-70.594895	**Longitude:**	-70.593128
Aft Draft:	20.32 ft	**Aft Draft:**	7.77 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 082908_114441

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

Trip #:	202
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/29/2008 17:26:53
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

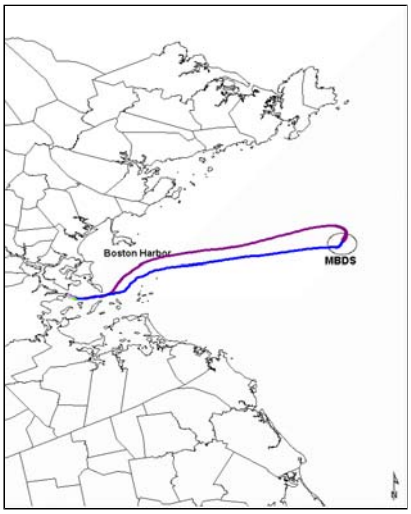
Placement Information:

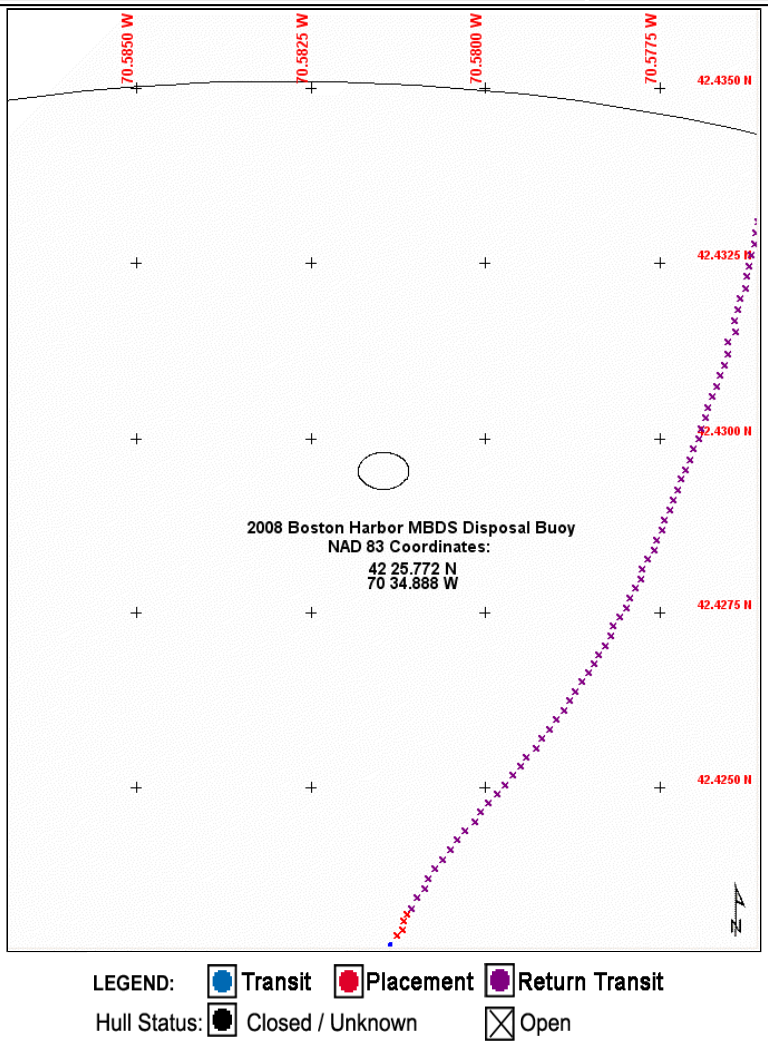
Placement Start:		**Placement End:**	
Time:	8/29/2008 21:21:33	**Time:**	8/29/2008 21:21:46
Lat:	42.422883	**Lat:**	42.423181
Long:	-70.581269	**Long:**	-70.581115
Aft Draft:	18.53 ft	**Aft Draft:**	12.18 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 8/29/2008 4:54:00 PM (Local)

Wave Height: 3.0 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143141

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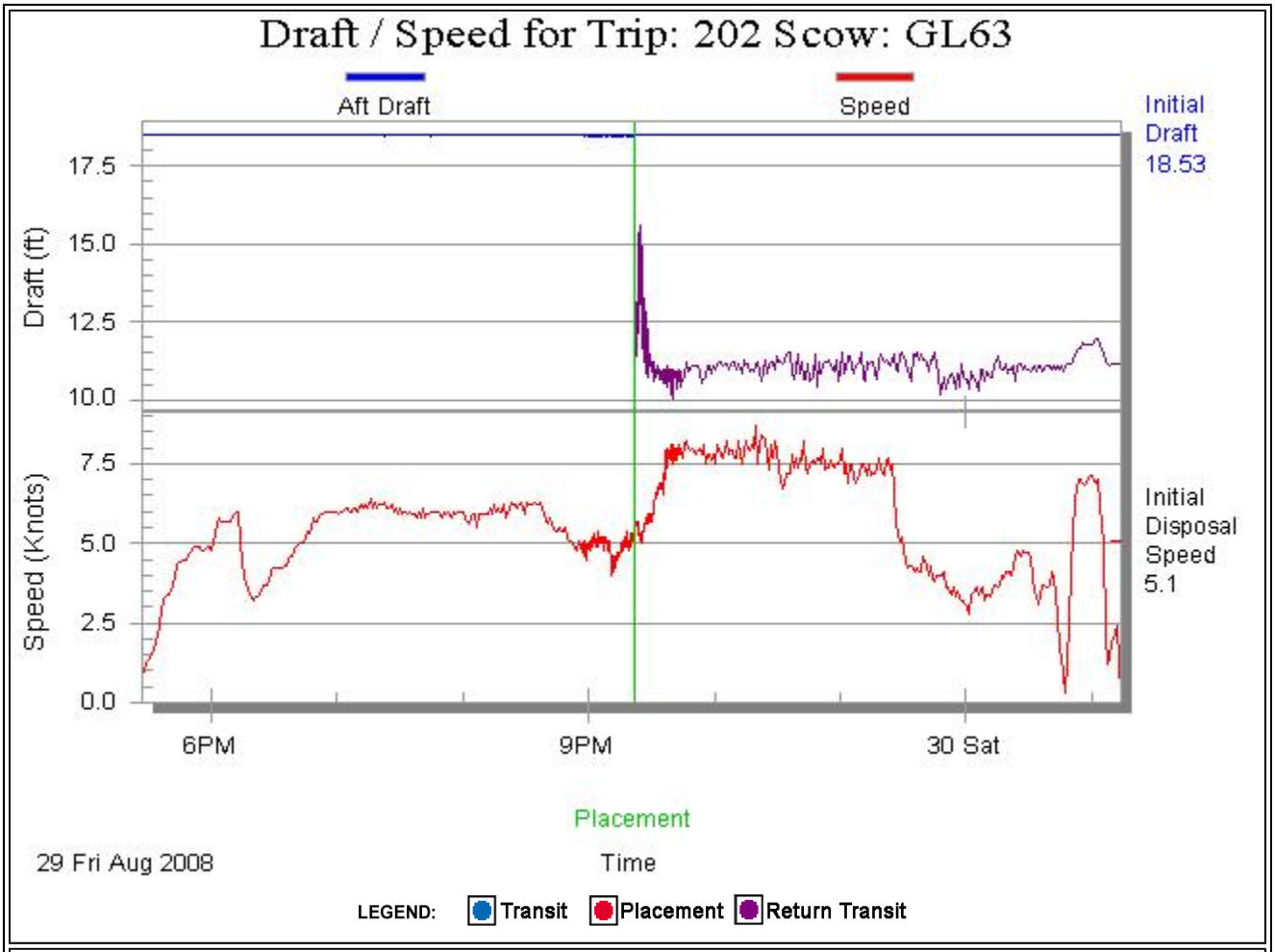

Trip Information

Trip #:	202
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/29/2008 17:26:53
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/29/2008 21:21:33
Latitude:	42.422883
Longitude:	-70.581269
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/29/2008 21:21:46
Latitude:	42.423181
Longitude:	-70.581115
Aft Draft:	12.18 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143141

2008 Boston Harbor Maintenance Dredging
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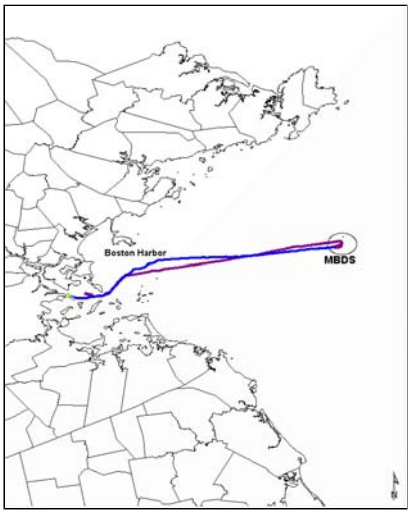
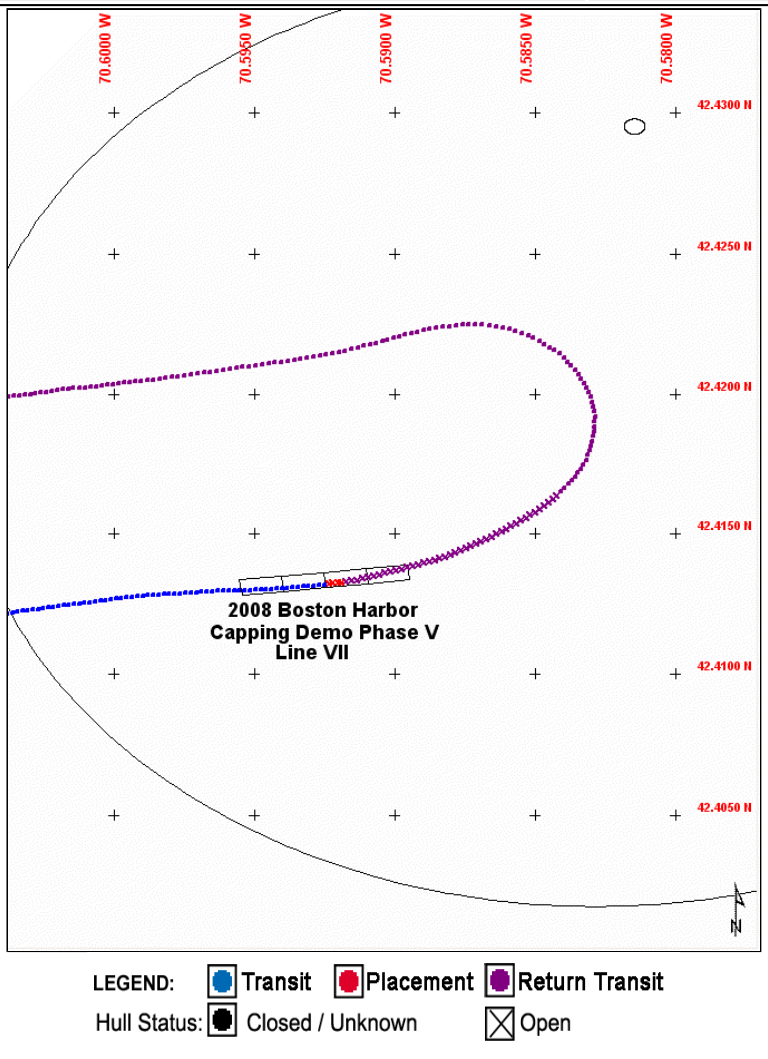
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	203				
Tug:	Cygnus	**Time:**	8/30/2008 05:47:59	**Time:**	8/30/2008 05:48:12
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.413213	**Lat:**	42.413260
Type:	Split Hull Scow	**Long:**	-70.592348	**Long:**	-70.591916
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	8/30/2008 01:51:54				
Init Aft Draft:	20.32 ft	**Aft Draft:**	20.32 ft	**Aft Draft:**	7.99 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/30/2008 1:03:00 AM (Local)
Wave Height: 3.6 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_143234

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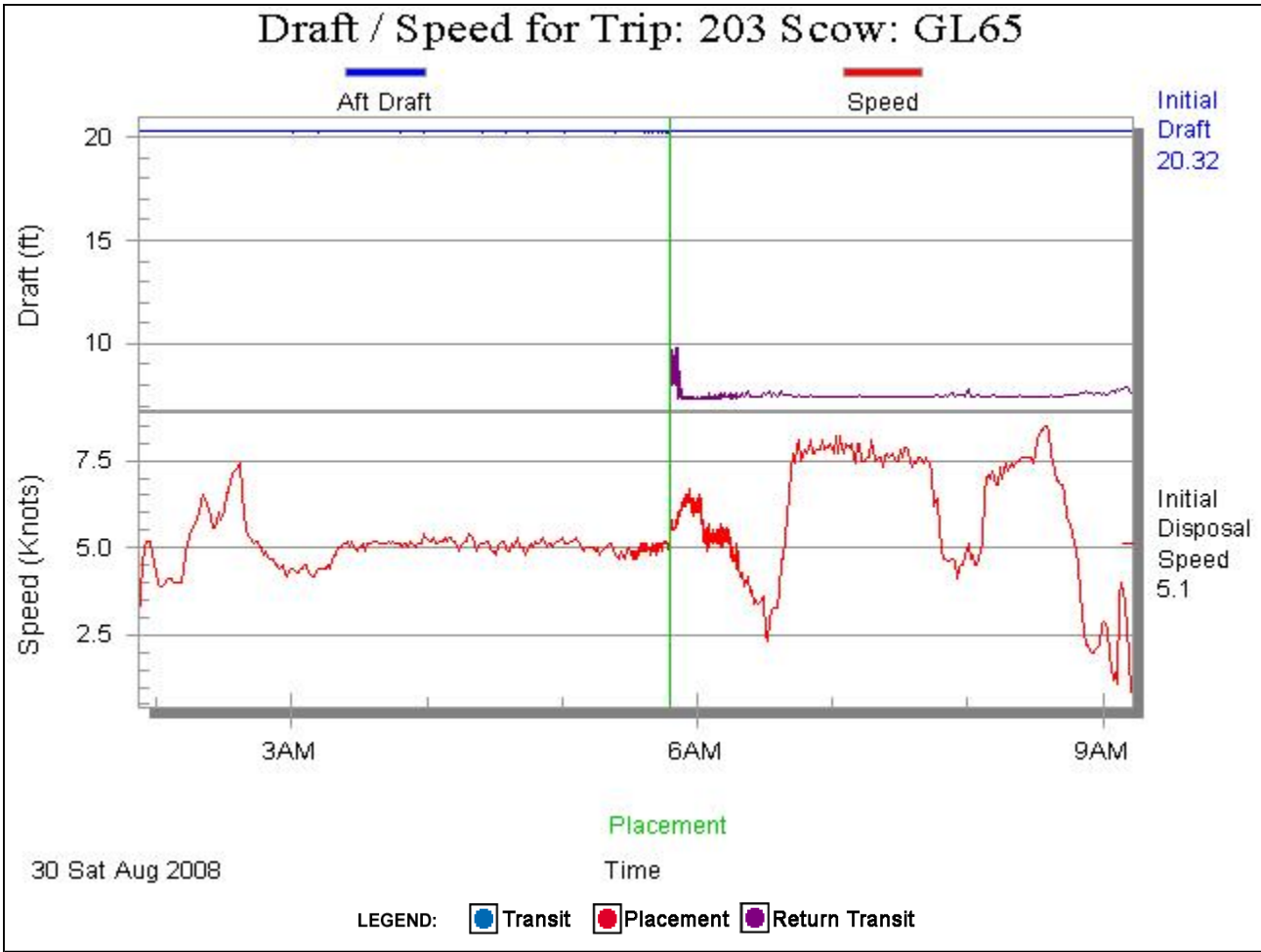

Trip Information

Trip #:	203
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/30/2008 01:51:54
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/30/2008 05:47:59
Latitude:	42.413213
Longitude:	-70.592348
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/30/2008 05:48:12
Latitude:	42.413260
Longitude:	-70.591916
Aft Draft:	7.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143234

2008 Boston Harbor Maintenance Dredging
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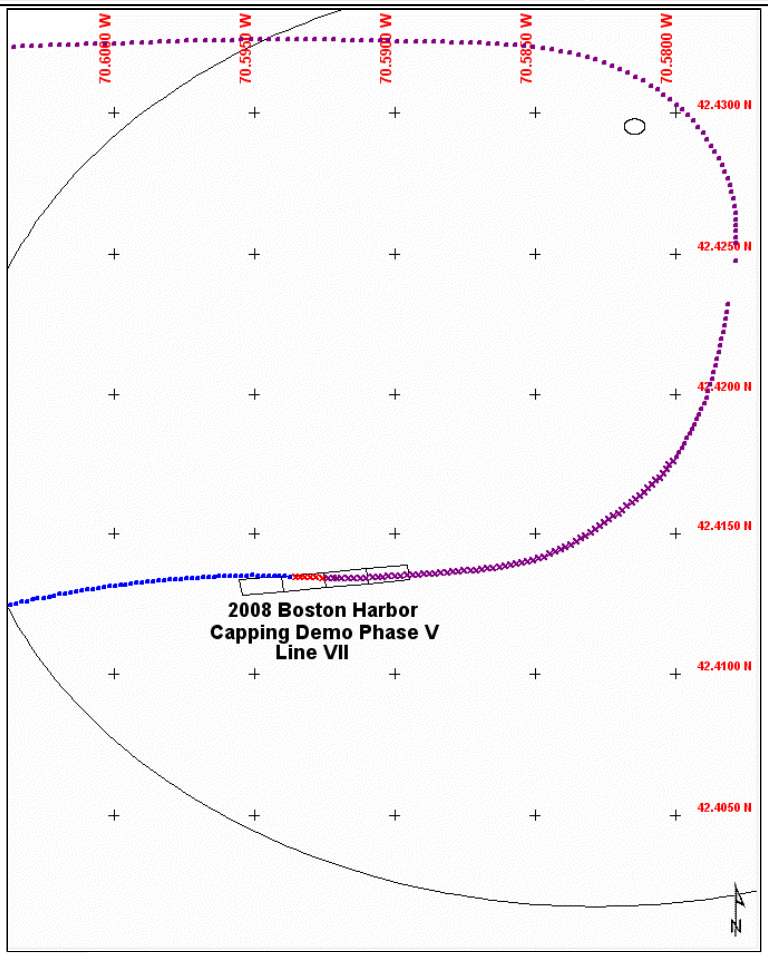
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	204				
Tug:	Cygnus	**Time:**	8/30/2008 15:04:39	**Time:**	8/30/2008 15:05:06
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.413477	**Lat:**	42.413428
Type:	Split Hull Scow	**Long:**	-70.593539	**Long:**	-70.592608
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	8/30/2008 11:40:47				
Init Aft Draft:	18.53 ft	**Aft Draft:**	18.53 ft	**Aft Draft:**	11.86 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/30/2008 10:55:00 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_143300

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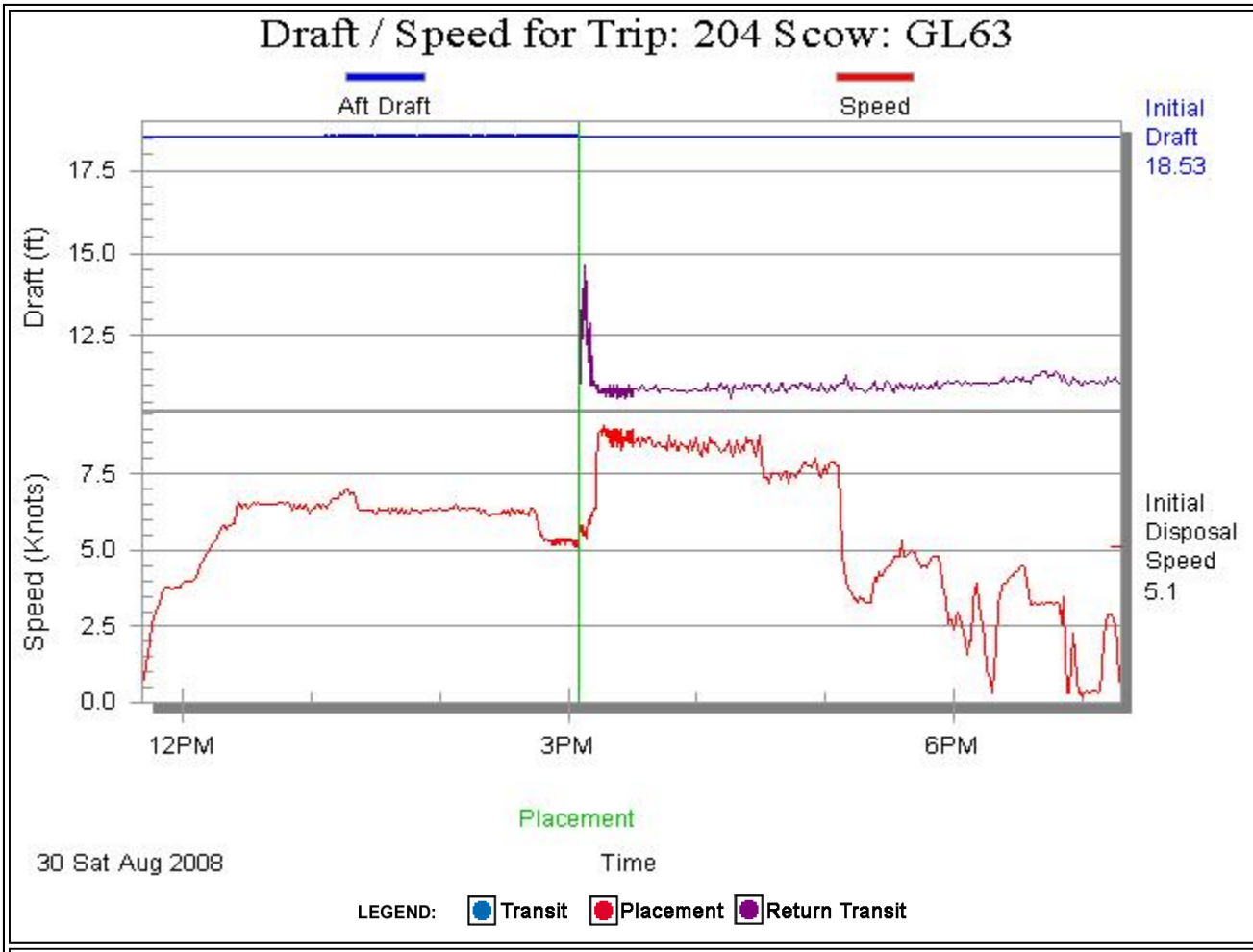

Trip Information

Trip #:	204
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/30/2008 11:40:47
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/30/2008 15:04:39
Latitude:	42.413477
Longitude:	-70.593539
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/30/2008 15:05:06
Latitude:	42.413428
Longitude:	-70.592608
Aft Draft:	11.86 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143300

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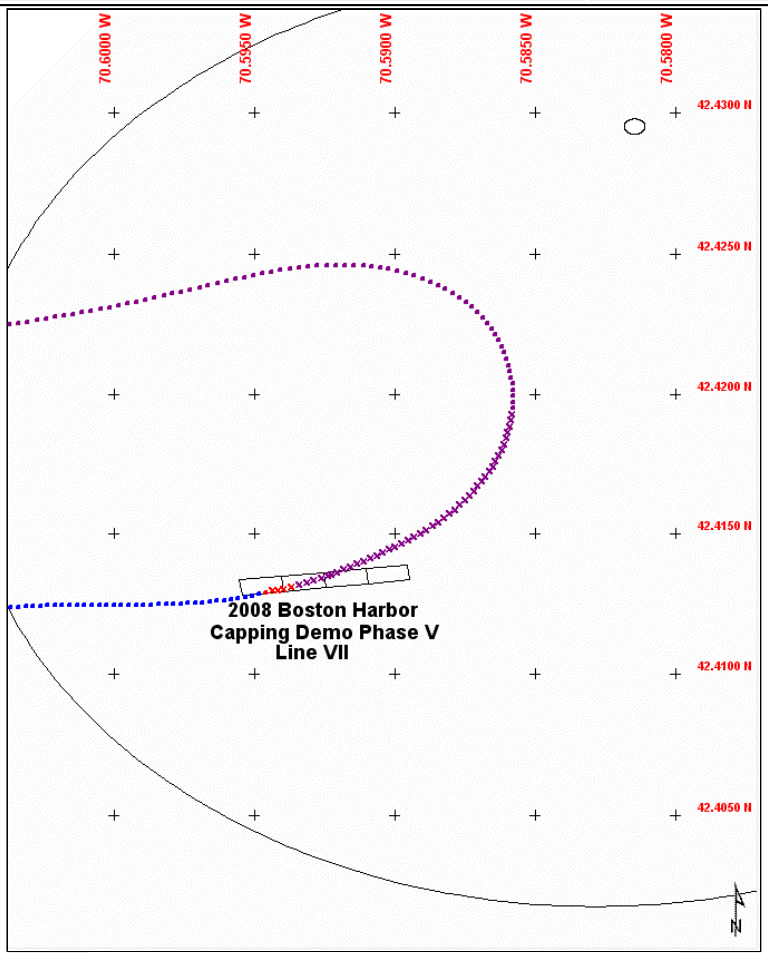
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	205				
Tug:	Cygnus	**Time:**	8/30/2008 23:38:53	**Time:**	8/30/2008 23:39:14
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.412905	**Lat:**	42.413117
Type:	Split Hull Scow	**Long:**	-70.594602	**Long:**	-70.593703
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	8/30/2008 20:12:11				
Init Aft Draft:	20.32 ft	**Aft Draft:**	20.32 ft	**Aft Draft:**	8.14 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/30/2008 6:49:00 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_143317

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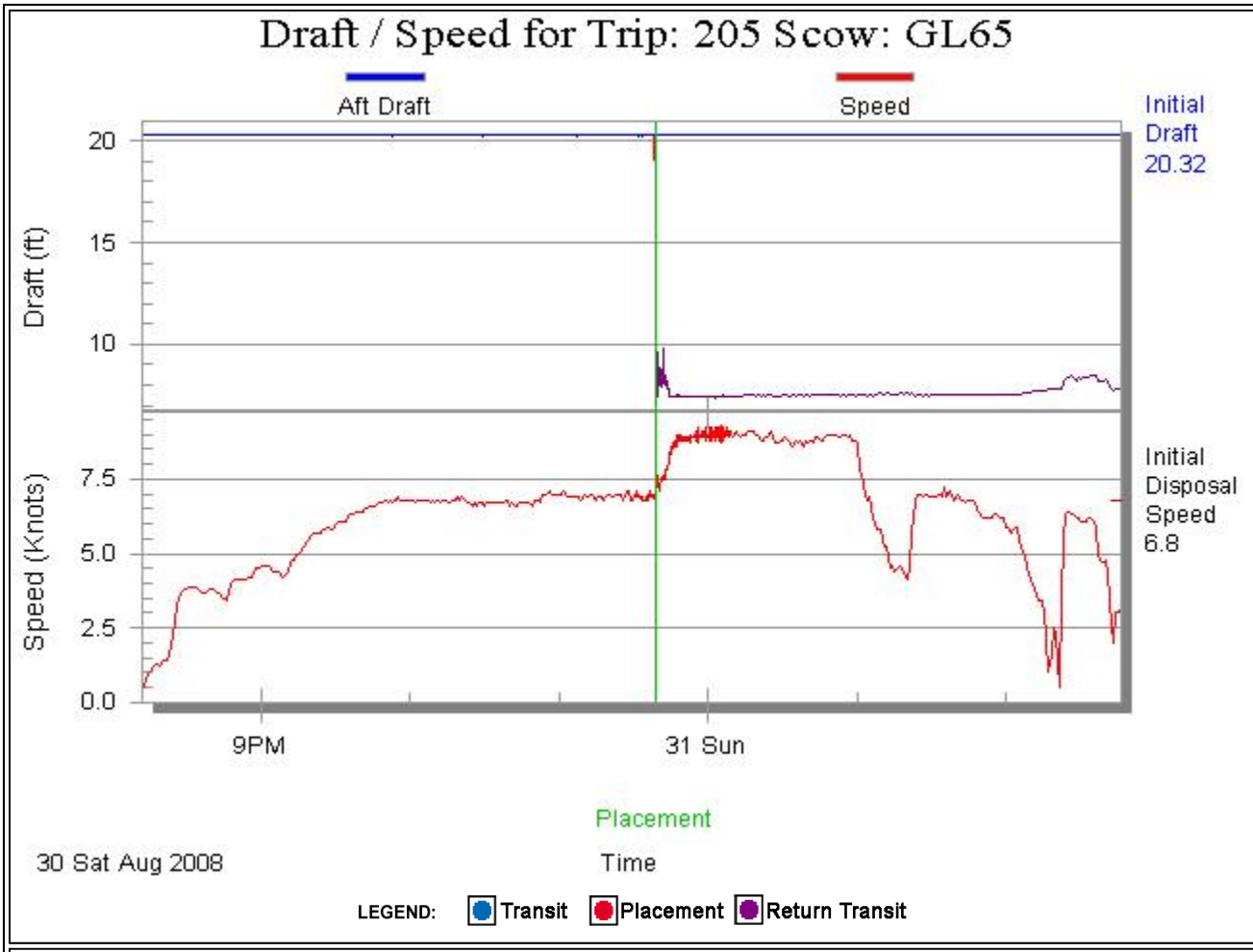

Trip Information

Trip #:	205
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/30/2008 20:12:11
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/30/2008 23:38:53
Latitude:	42.412905
Longitude:	-70.594602
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/30/2008 23:39:14
Latitude:	42.413117
Longitude:	-70.593703
Aft Draft:	8.14 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143317

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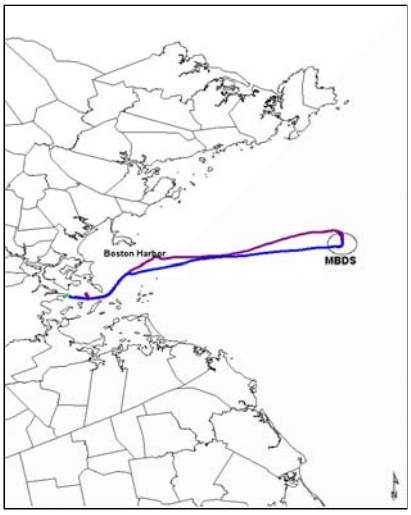
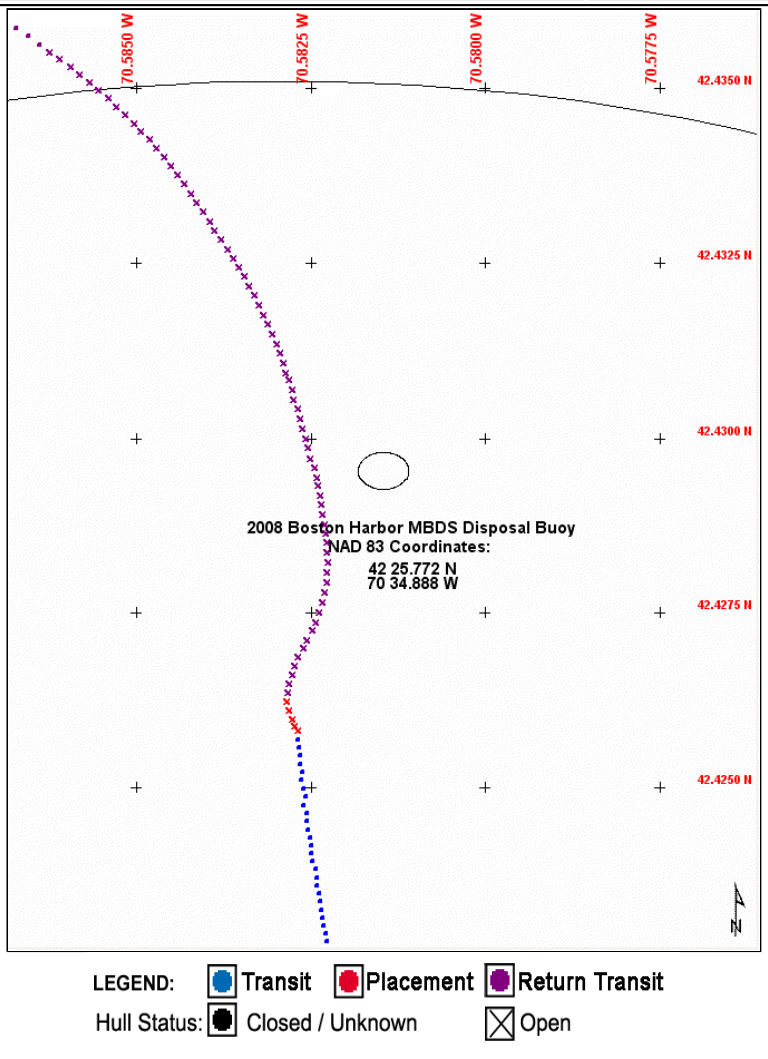
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	206				
Tug:	Cygnus	**Time:**	8/31/2008 07:03:51	**Time:**	8/31/2008 07:04:12
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.425805	**Lat:**	42.426219
Type:	Split Hull Scow	**Long:**	-70.582684	**Long:**	-70.582844
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	8/31/2008 02:37:53				
Init Aft Draft:	18.53 ft	**Aft Draft:**	18.53 ft	**Aft Draft:**	11.94 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/31/2008 2:54:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_143202

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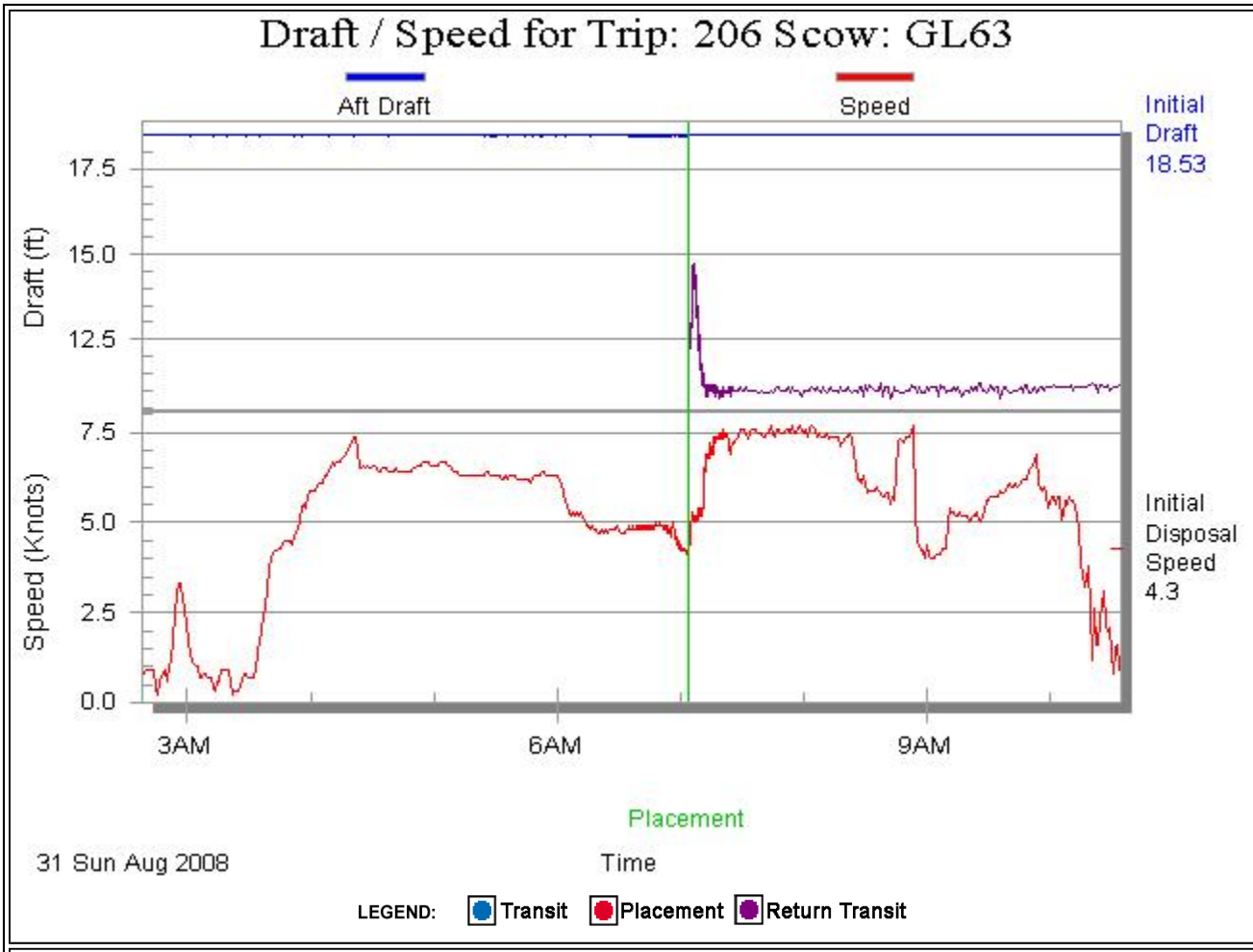

Trip Information

Trip #:	206
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/31/2008 02:37:53
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/31/2008 07:03:51
Latitude:	42.425805
Longitude:	-70.582684
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/31/2008 07:04:12
Latitude:	42.426219
Longitude:	-70.582844
Aft Draft:	11.94 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143202

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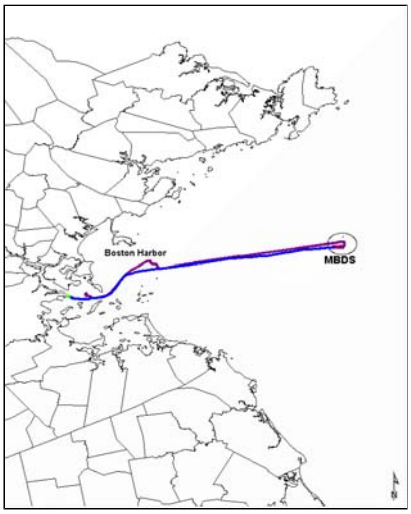
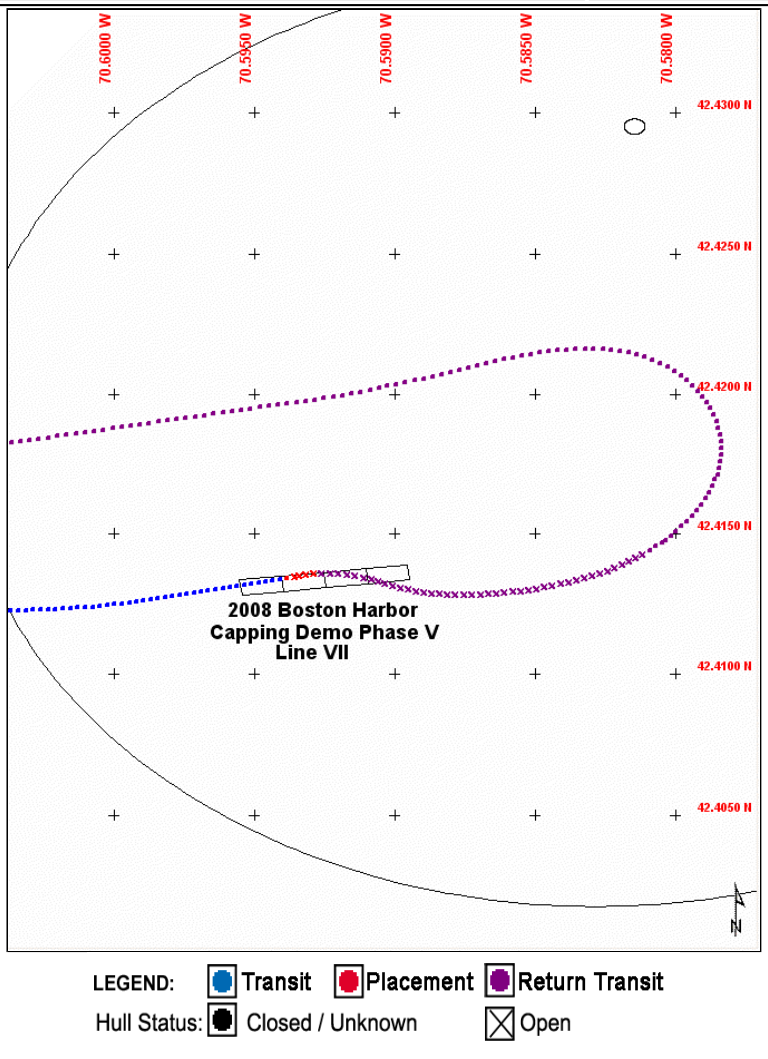
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	207				
Tug:	Cygnus	**Time:**	8/31/2008 15:35:53	**Time:**	8/31/2008 15:36:14
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.413436	**Lat:**	42.413577
Type:	Split Hull Scow	**Long:**	-70.593858	**Long:**	-70.592924
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	8/31/2008 12:25:11				
Init Aft Draft:	20.40 ft	**Aft Draft:**	20.40 ft	**Aft Draft:**	9.03 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/31/2008 12:04:00 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_143349

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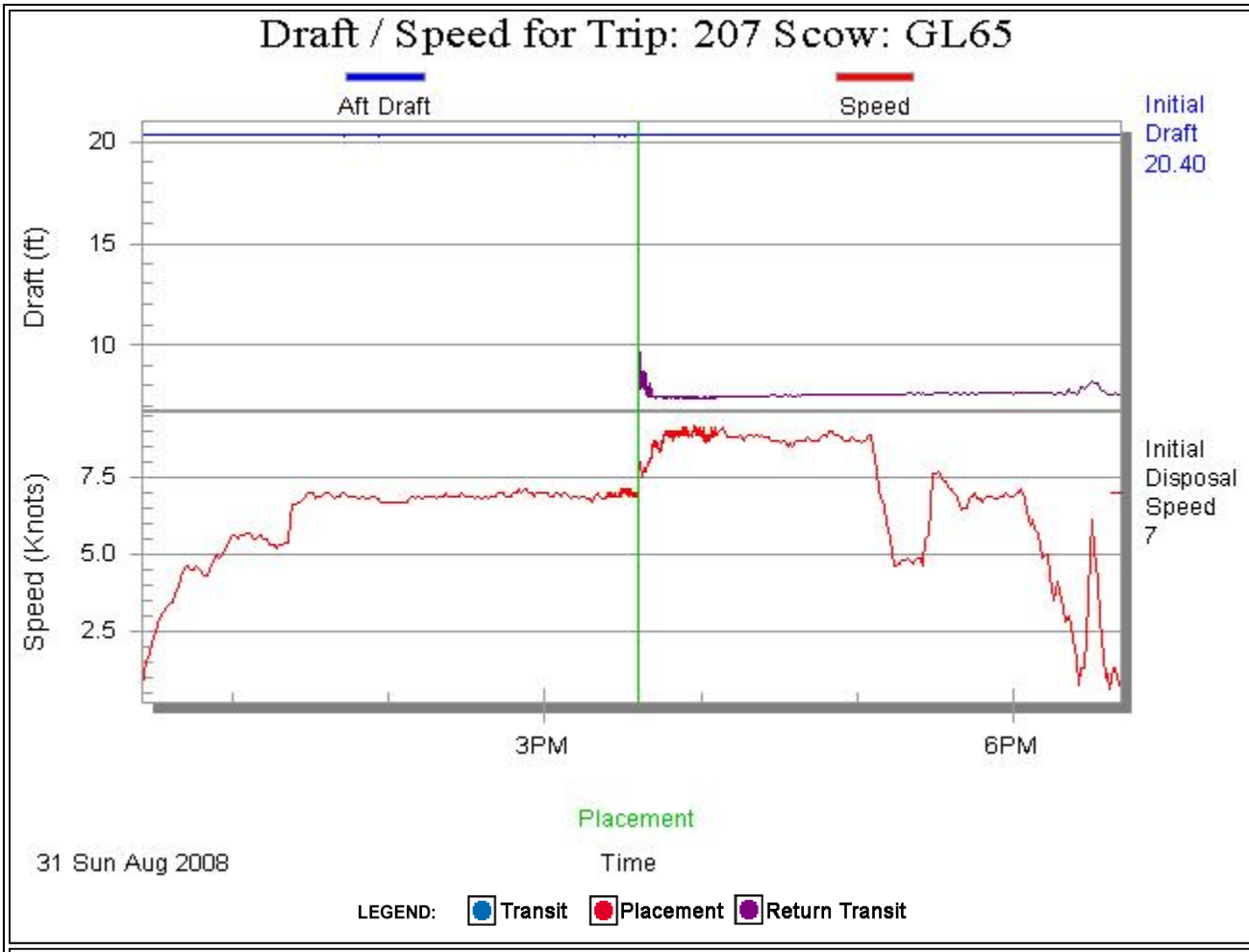

Trip Information

Trip #:	207
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	8/31/2008 12:25:11
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	8/31/2008 15:35:53
Latitude:	42.413436
Longitude:	-70.593858
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	8/31/2008 15:36:14
Latitude:	42.413577
Longitude:	-70.592924
Aft Draft:	9.03 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143349

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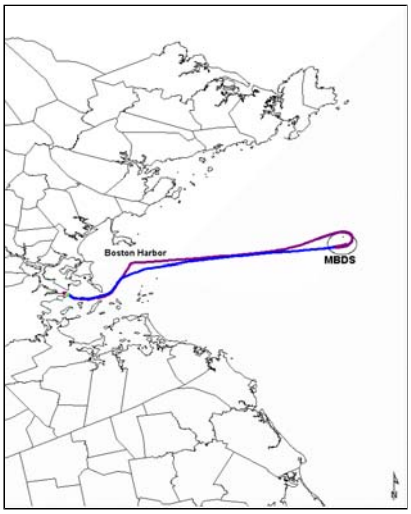
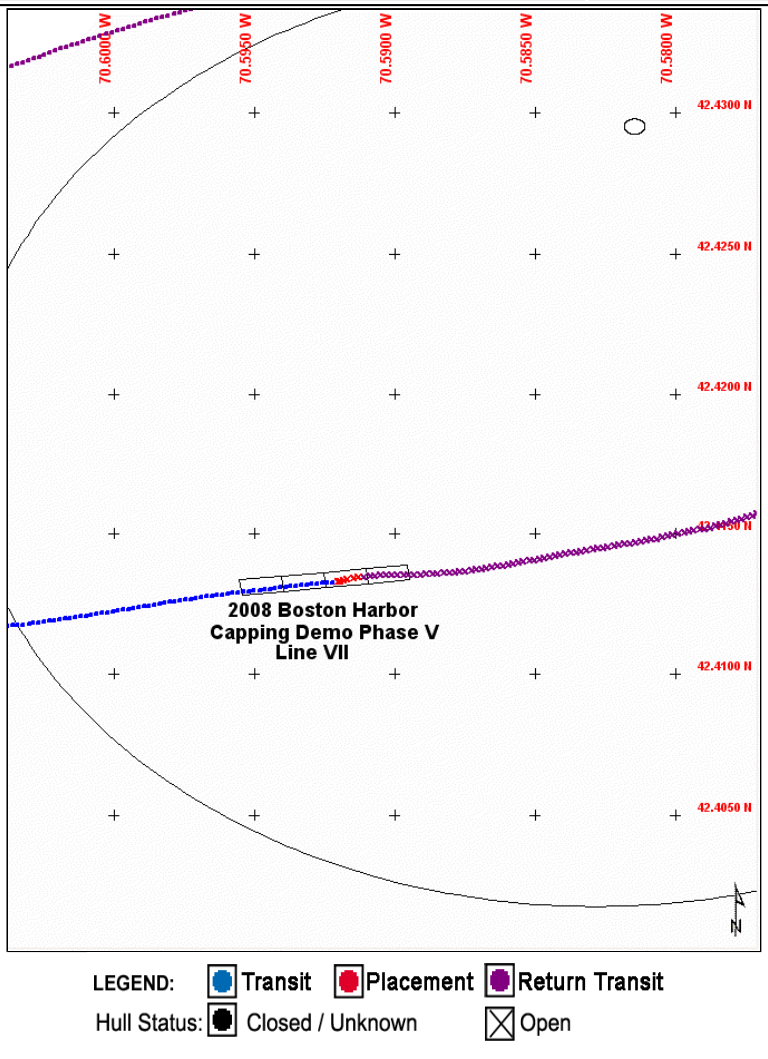
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	208				
Tug:	Cygnus	**Time:**	9/1/2008 02:27:50	**Time:**	9/1/2008 02:28:13
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.413302	**Lat:**	42.413451
Type:	Split Hull Scow	**Long:**	-70.592052	**Long:**	-70.591324
Technique:	Bottom Dump				
Bin Volume:	5600 cu yd				
Start Time:	8/31/2008 22:48:05				
Init Aft Draft:	18.53 ft	**Aft Draft:**	18.53 ft	**Aft Draft:**	12.66 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 8/31/2008 10:23:00 PM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_143431

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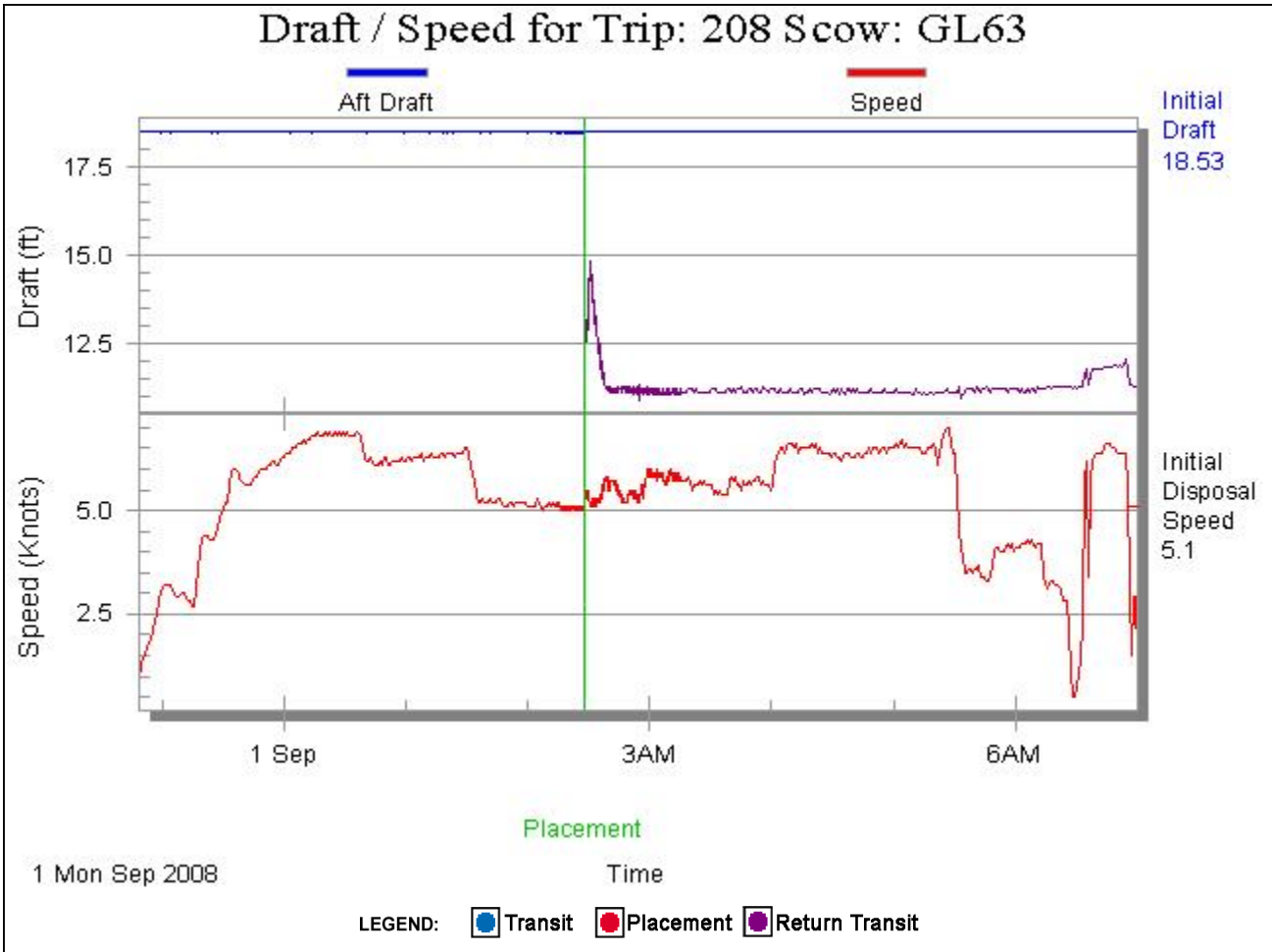

Trip Information

Trip #:	208
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	8/31/2008 22:48:05
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/1/2008 02:27:50
Latitude:	42.413302
Longitude:	-70.592052
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/1/2008 02:28:13
Latitude:	42.413451
Longitude:	-70.591324
Aft Draft:	12.66 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143431

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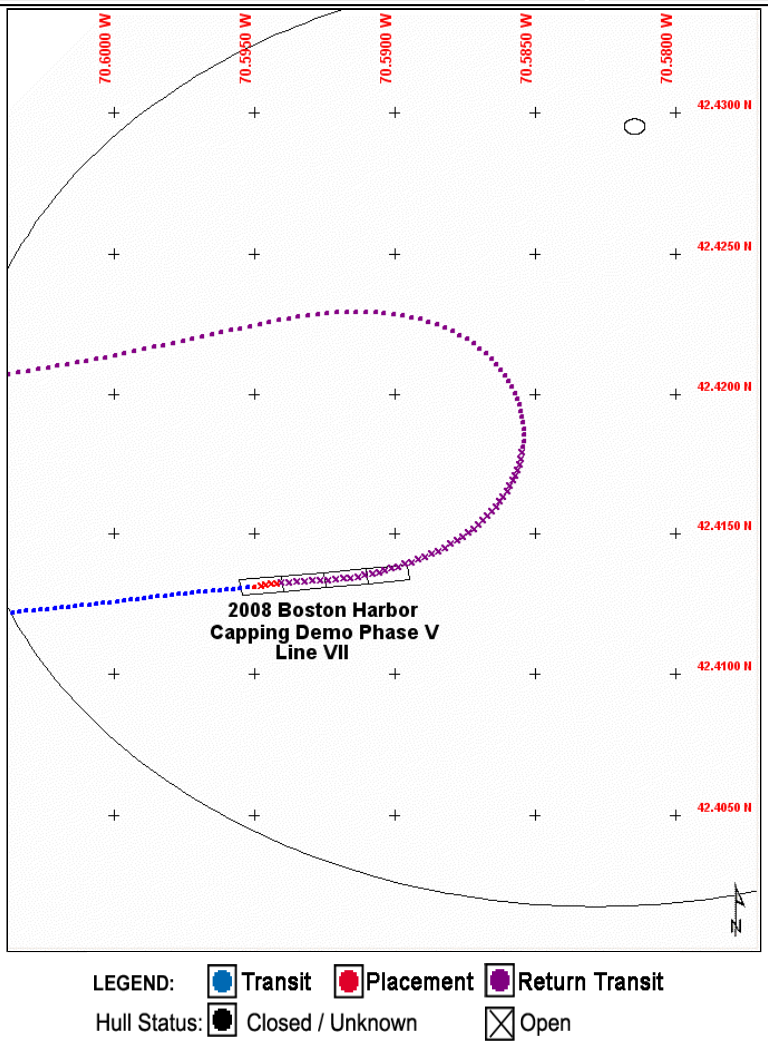
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	209				
Tug:	Cygnus	**Time:**	9/1/2008 10:33:28	**Time:**	9/1/2008 10:33:47
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.413108	**Lat:**	42.413229
Type:	Split Hull Scow	**Long:**	-70.595023	**Long:**	-70.594231
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	9/1/2008 07:24:11				
Init Aft Draft:	20.32 ft	**Aft Draft:**	20.32 ft	**Aft Draft:**	9.25 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/1/2008 6:54:00 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_143452

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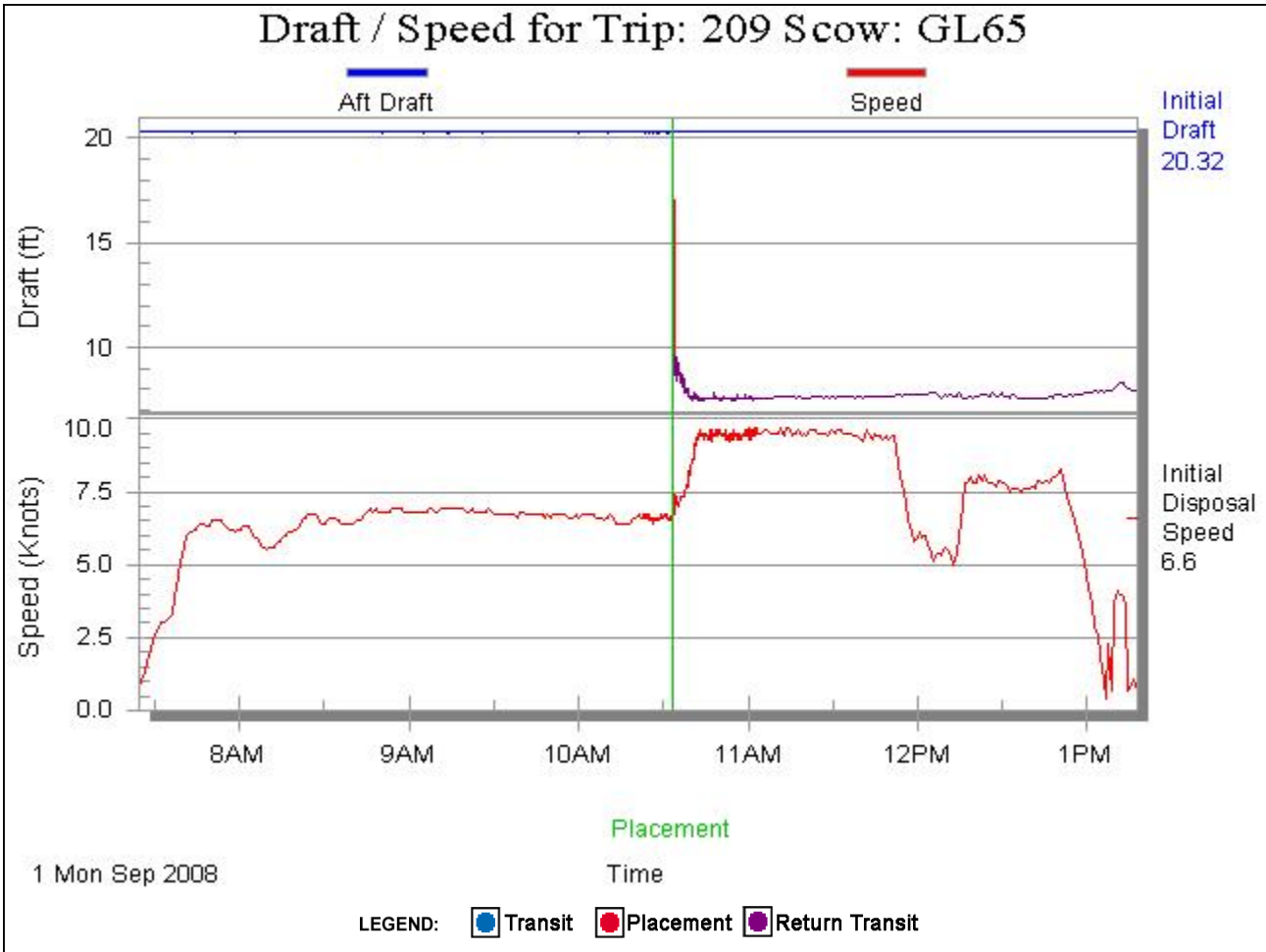

Trip Information

Trip #:	209
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/1/2008 07:24:11
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/1/2008 10:33:28
Latitude:	42.413108
Longitude:	-70.595023
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/1/2008 10:33:47
Latitude:	42.413229
Longitude:	-70.594231
Aft Draft:	9.25 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143452

2008 Boston Harbor Maintenance Dredging
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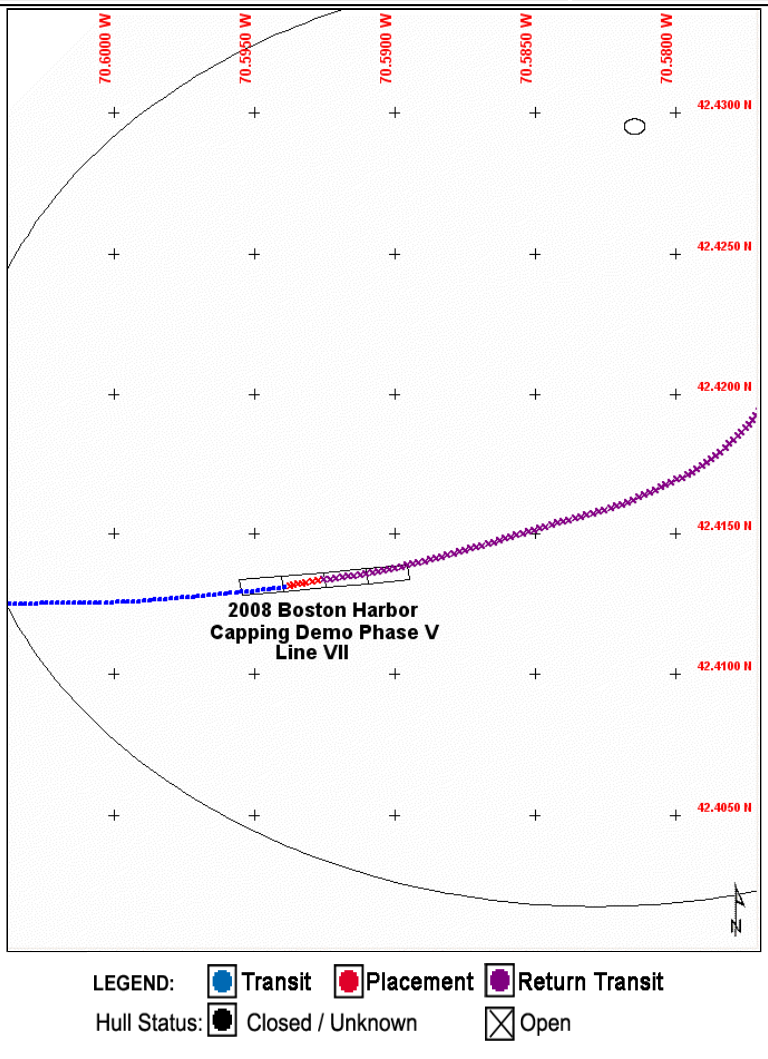
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	210				
Tug:	Cygnus	**Time:**	9/1/2008 19:50:56	**Time:**	9/1/2008 19:51:25
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.413143	**Lat:**	42.413328
Type:	Split Hull Scow	**Long:**	-70.593746	**Long:**	-70.592762
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	9/1/2008 15:46:04				
Init Aft Draft:	18.61 ft	**Aft Draft:**	18.61 ft	**Aft Draft:**	11.23 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/1/2008 4:18:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. GPS data is unavailable between 7:48pm(local) 9/1/08 and 8:50am(local) 9/2/08. At 8:50am(local) 9/2/08 SAIC contacted the Inspector aboard the Tug Cygnus in relation to the unavailable GPS data. SAIC remotely reset the cellular/GPS modem at 8:50am(local) 9/2/08.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090208_144431

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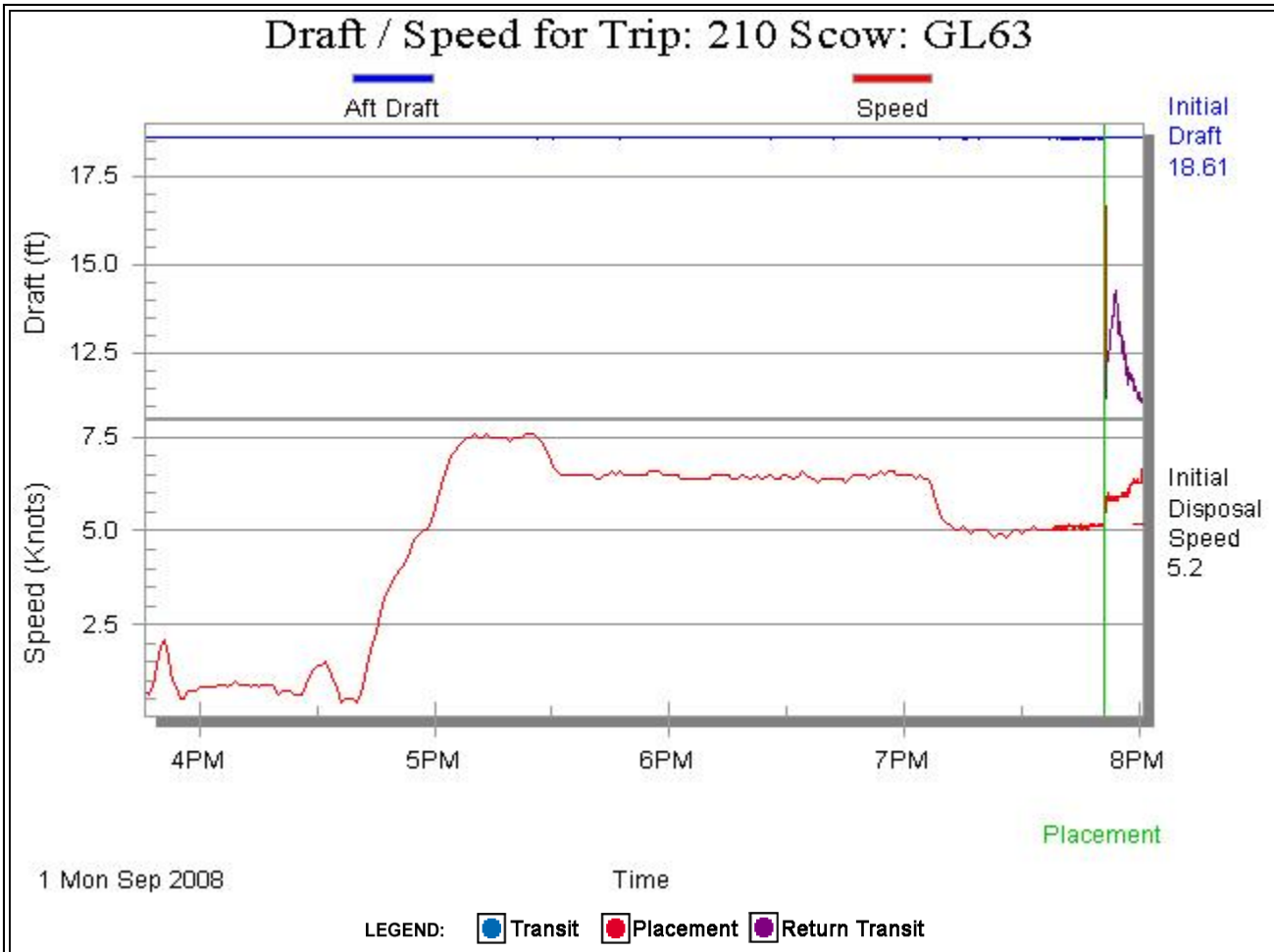

Trip Information

Trip #:	210
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/1/2008 15:46:04
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/1/2008 19:50:56	**Time:**	9/1/2008 19:51:25
Latitude:	42.413143	**Latitude:**	42.413328
Longitude:	-70.593746	**Longitude:**	-70.592762
Aft Draft:	18.61 ft	**Aft Draft:**	11.23 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. GPS data is unavailable between 7:48pm (local) 9/1/08 and 8:50am(local) 9/2/08. At 8:50am(local) 9/2/08 SAIC contacted the Inspector aboard the Tug Cygnus in relation to the unavailable GPS data. SAIC remotely reset the cellular/GPS modem at 8:50am(local) 9/2/08.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_144431

W912WJ-07-C-0023

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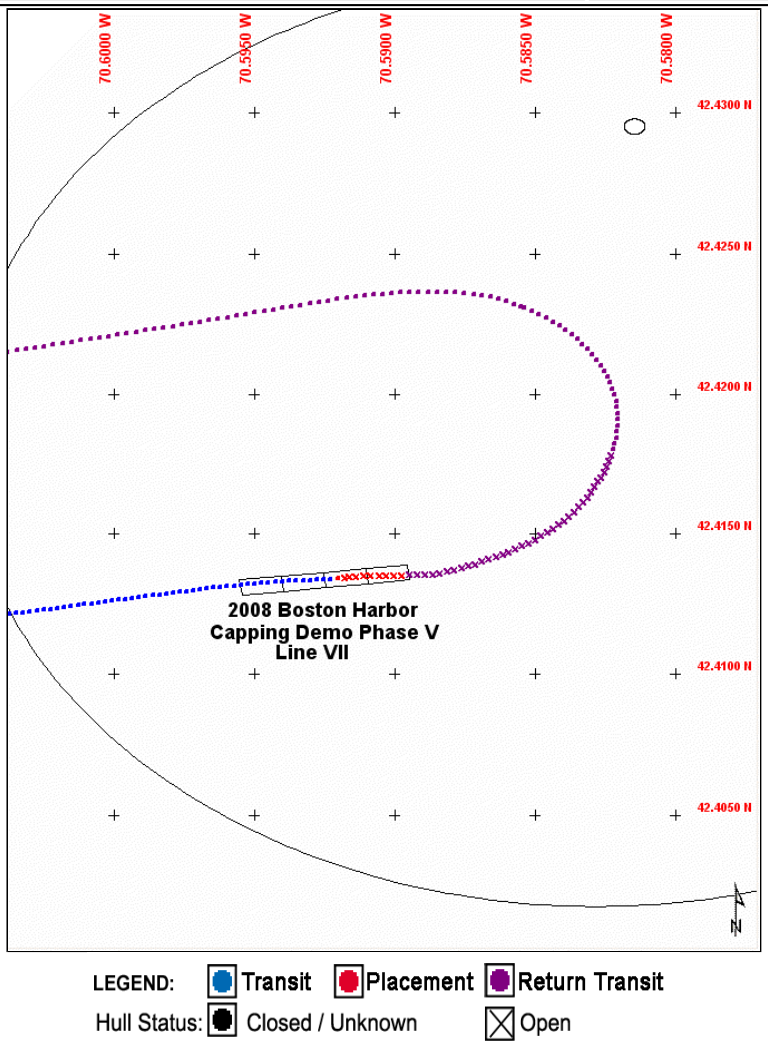
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	211				
Tug:	Cygnus	**Time:**	9/2/2008 05:04:58	**Time:**	9/2/2008 05:05:49
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.413421	**Lat:**	42.413517
Type:	Split Hull Scow	**Long:**	-70.592052	**Long:**	-70.589750
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	9/2/2008 02:01:46				
Init Aft Draft:	20.32 ft	**Aft Draft:**	20.32 ft	**Aft Draft:**	7.70 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 9/2/2008 1:41:00 AM (Local)

Wave Height: 1.6 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143512

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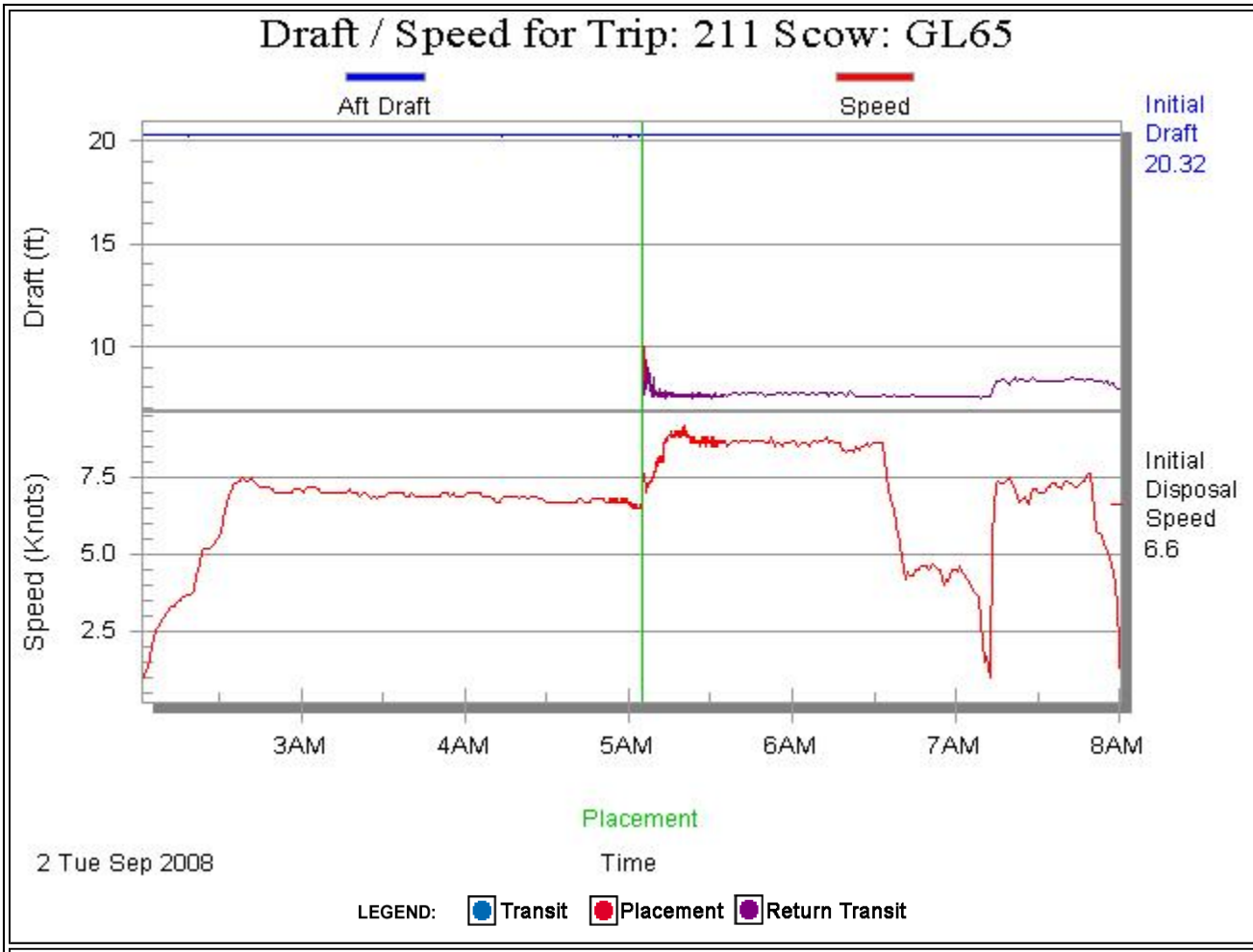


Trip Information

Trip #:	211
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/2/2008 02:01:46
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/2/2008 05:04:58
Latitude:	42.413421
Longitude:	-70.592052
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/2/2008 05:05:49
Latitude:	42.413517
Longitude:	-70.589750
Aft Draft:	7.70 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090208_143512

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

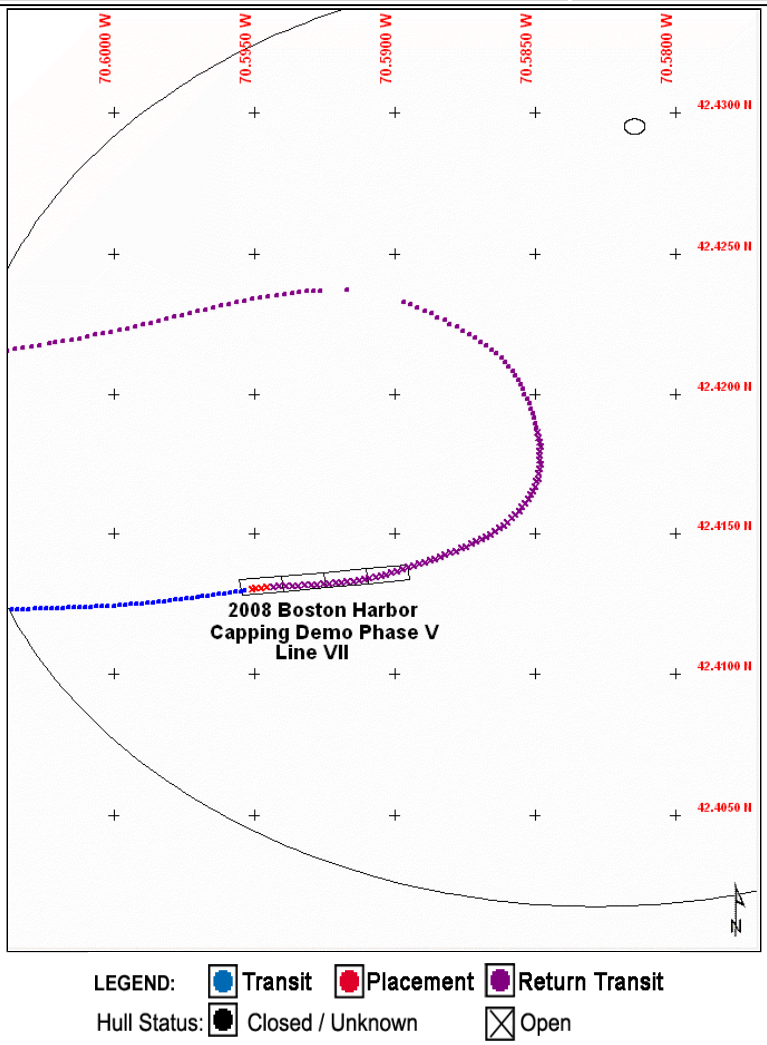
Trip #:	212
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/2/2008 12:08:30
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/2/2008 16:21:02	9/2/2008 16:21:17
Lat:	42.413012	42.413102
Long:	-70.595090	-70.594575
Aft Draft:	18.61 ft	11.63 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/2/2008 11:45:00 AM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. Horizontal positioning data is unavailable prior to 9/2/2008 8:50:16 AM (Local) due to the GPS antenna losing satellite signal. SAIC remotely accessed the ADISS tracking system onboard the GL63 at approximately 8:45 AM on 9/2/08 in order to re-initialize the GPS. After the re-initialization, horizontal positioning data started to be collected normally.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090308_151216

ADISS Automated Disposal Surveillance System

2008 Boston Harbor Maintenance Dredging
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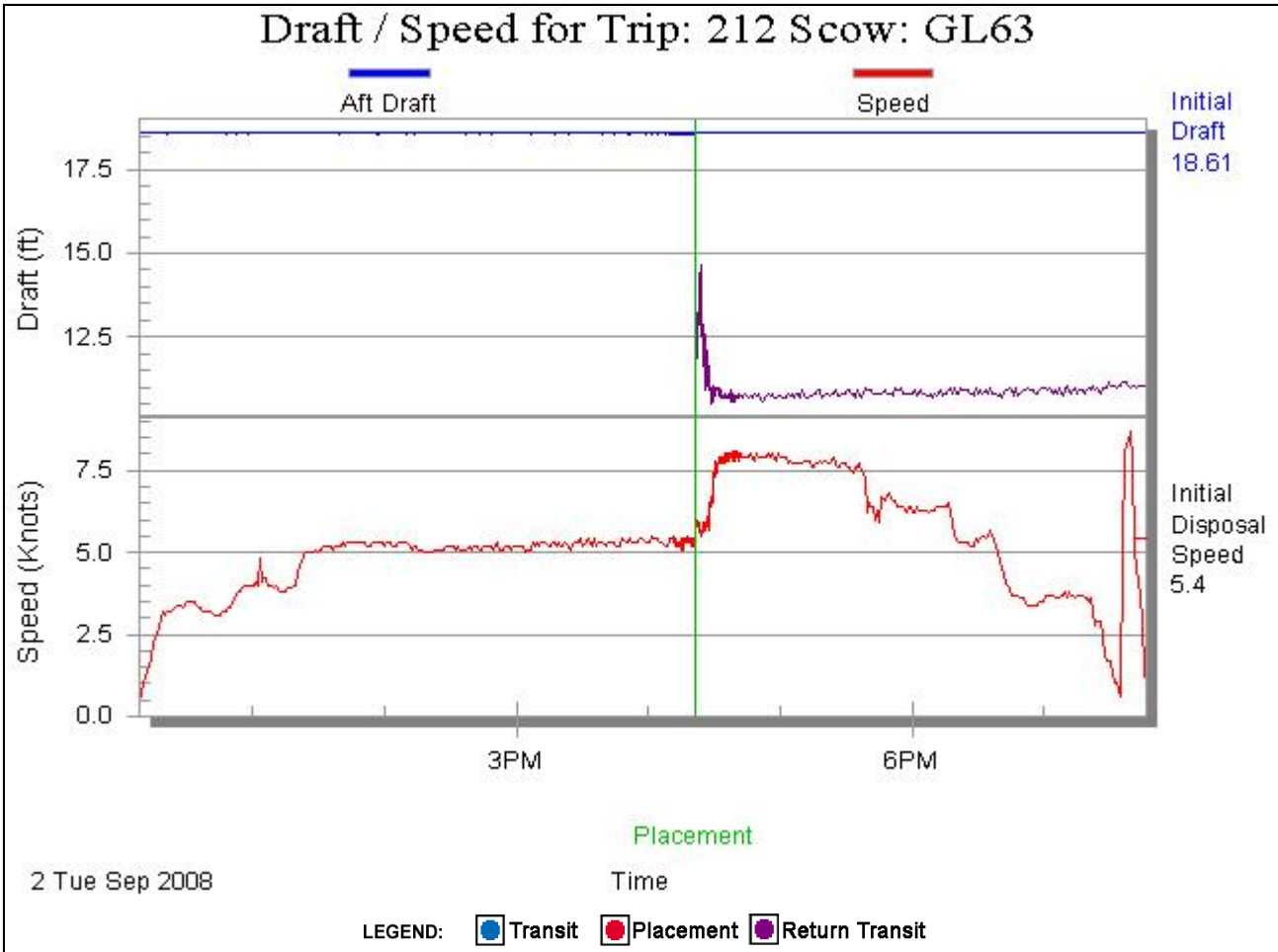


Trip Information

Trip #:	212
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/2/2008 12:08:30
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/2/2008 16:21:02	**Time:**	9/2/2008 16:21:17
Latitude:	42.413012	**Latitude:**	42.413102
Longitude:	-70.595090	**Longitude:**	-70.594575
Aft Draft:	18.61 ft	**Aft Draft:**	11.63 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. Horizontal positioning data is unavailable prior to 9/2/2008 8:50:16 AM (Local) due to the GPS antenna losing satellite signal. SAIC remotely accessed the ADISS tracking system onboard the GL63 at approximately 8:45 AM on 9/2/08 in order to re-initialize the GPS. After the re-initialization, horizontal positioning data started to be collected normally.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090308_151216

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

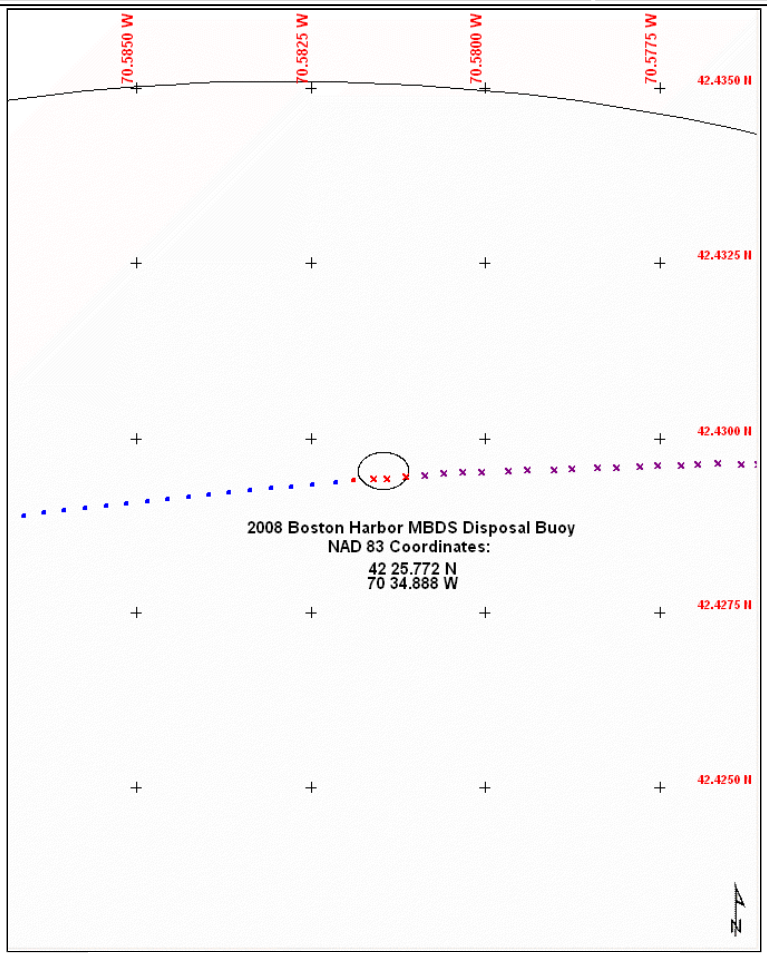
Trip #:	213
Tug:	Cygnus
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	9/3/2008 01:30:50
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/3/2008 04:14:51	**Time:**	9/3/2008 04:15:06
Lat:	42.429385	**Lat:**	42.429448
Long:	-70.581902	**Long:**	-70.581134
Aft Draft:	20.32 ft	**Aft Draft:**	8.07 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: N/A (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090408_140521

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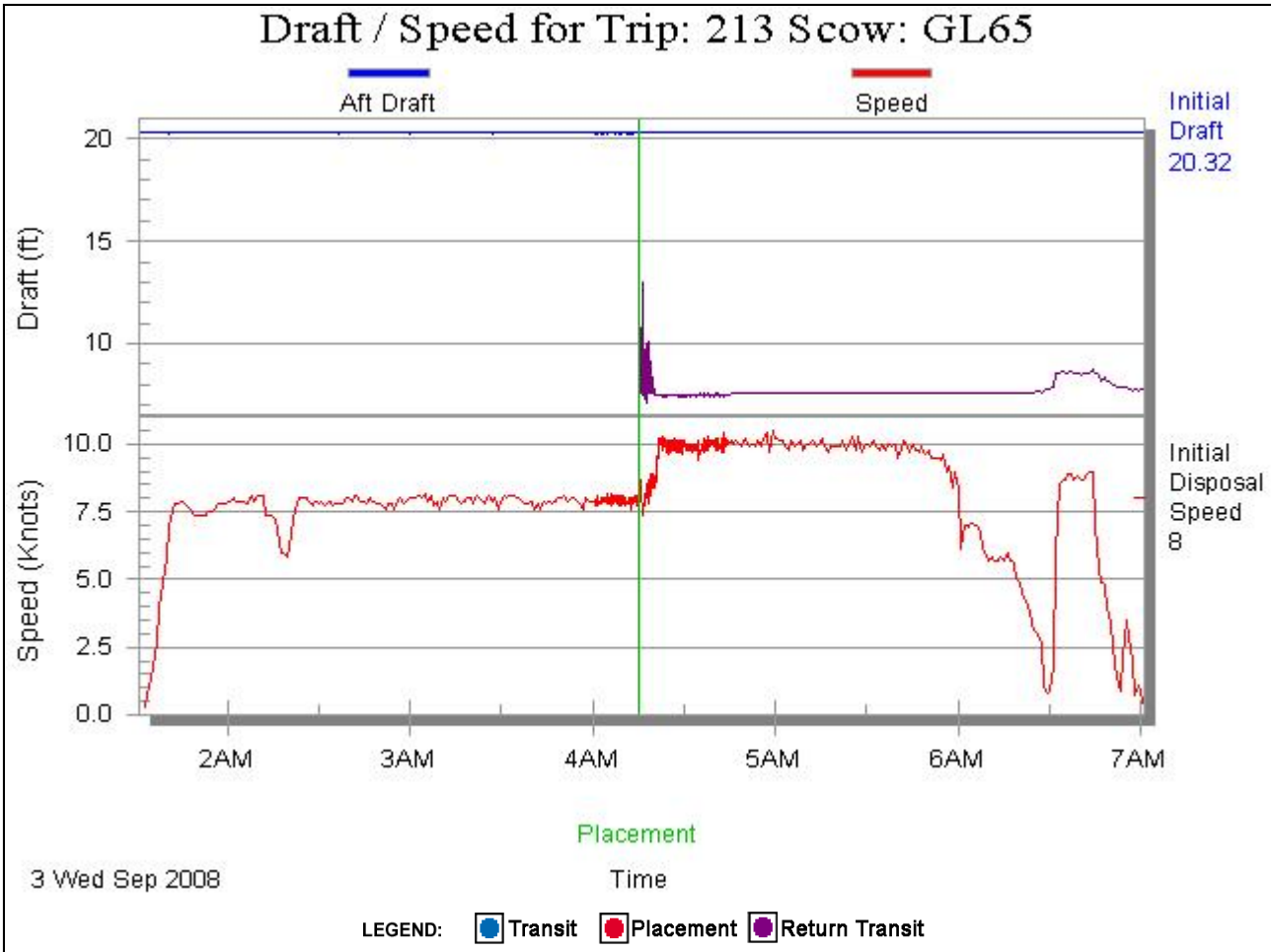

Trip Information

Trip #:	213
Tug Name:	Cygnus
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	9/3/2008 01:30:50
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/3/2008 04:14:51
Latitude:	42.429385
Longitude:	-70.581902
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/3/2008 04:15:06
Latitude:	42.429448
Longitude:	-70.581134
Aft Draft:	8.07 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090408_140521

2008 Boston Harbor Maintenance Dredging
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Trip Information:

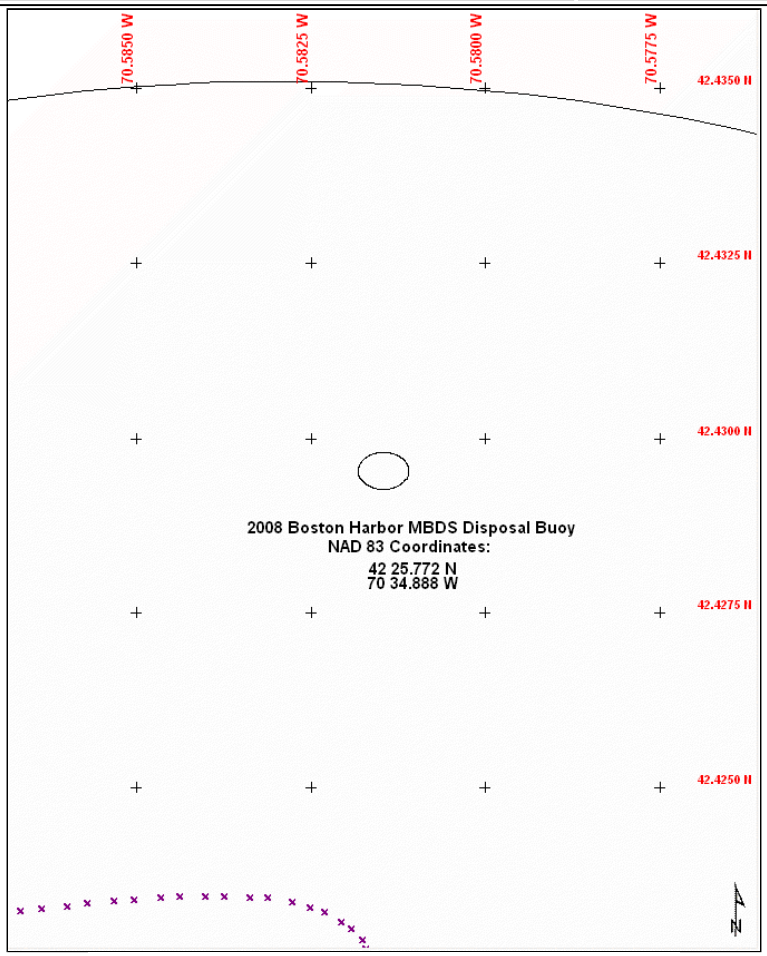
Trip #:	214
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	9/3/2008 07:17:16
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/3/2008 10:55:20	**Time:**	9/3/2008 10:55:34
Lat:	42.418880	**Lat:**	42.419383
Long:	-70.581809	**Long:**	-70.581783
Aft Draft:	18.53 ft	**Aft Draft:**	11.15 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/3/2008 10:46:00 AM (Local)
Wave Height: 4.9 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicated that the scow remained open throughout the return transit of load #214. The sensor went back to the closed position after returning to the dredge area.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090408_140553

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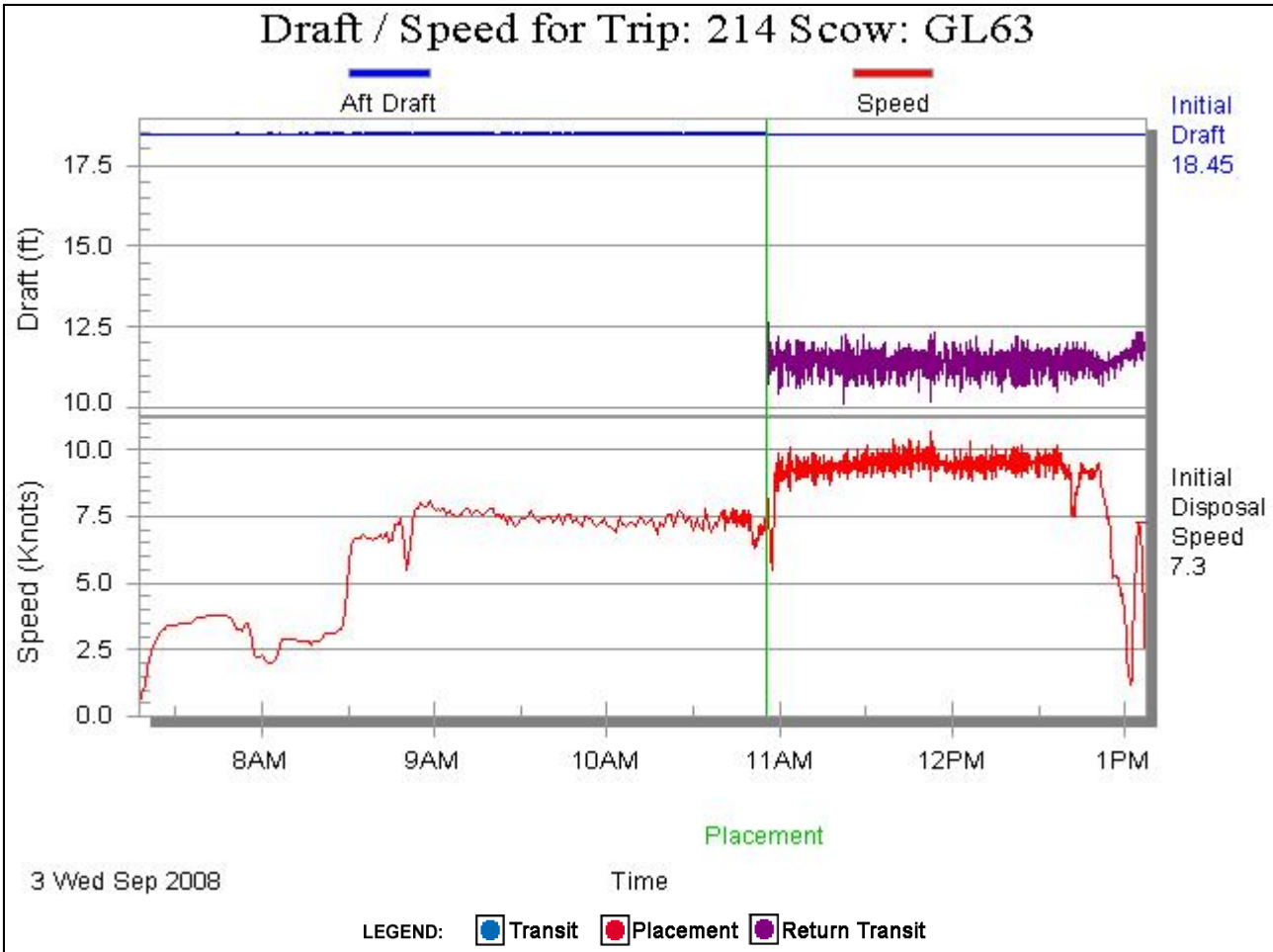

Trip Information

Trip #:	214
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	9/3/2008 07:17:16
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/3/2008 10:55:20	**Time:**	9/3/2008 10:55:34
Latitude:	42.418880	**Latitude:**	42.419383
Longitude:	-70.581809	**Longitude:**	-70.581783
Aft Draft:	18.53 ft	**Aft Draft:**	11.15 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicated that the scow remained open throughout the return transit of load #214. The sensor went back to the closed position after returning to the dredge area.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090408_140553

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Trip Information:

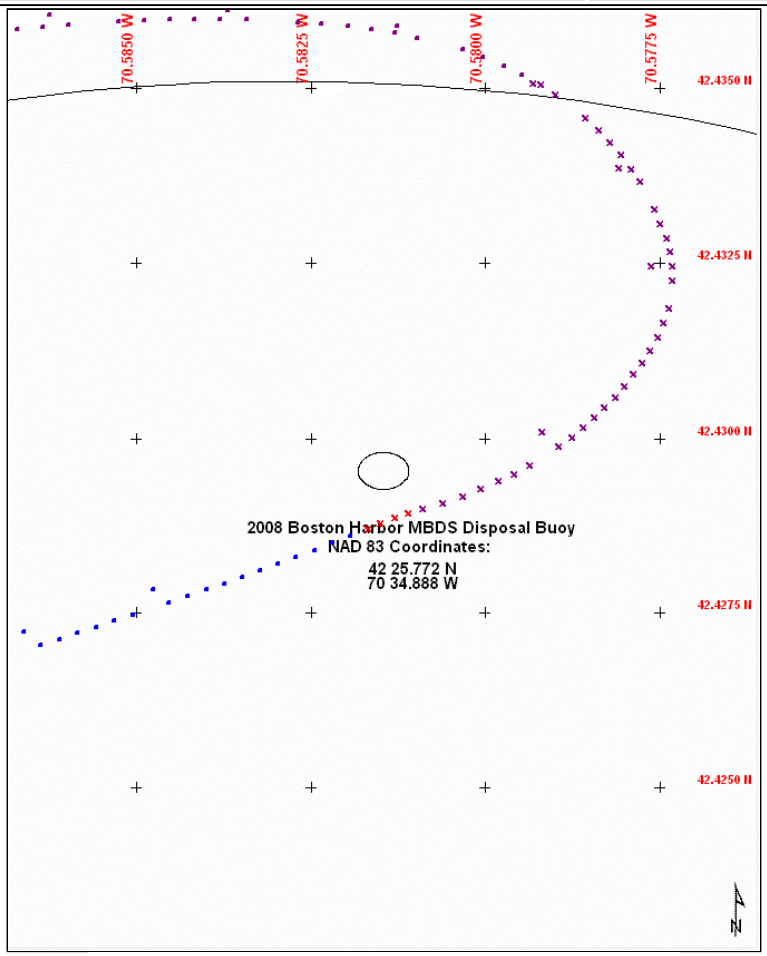
Trip #:	215
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/3/2008 15:49:47
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/3/2008 18:35:33	**Time:**	9/3/2008 18:35:46
Lat:	42.428696	**Lat:**	42.428908
Long:	-70.581694	**Long:**	-70.581099
Aft Draft:	20.32 ft	**Aft Draft:**	8.44 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/3/2008 8:50:00 PM (Local)
Wave Height: 4.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090408_140446

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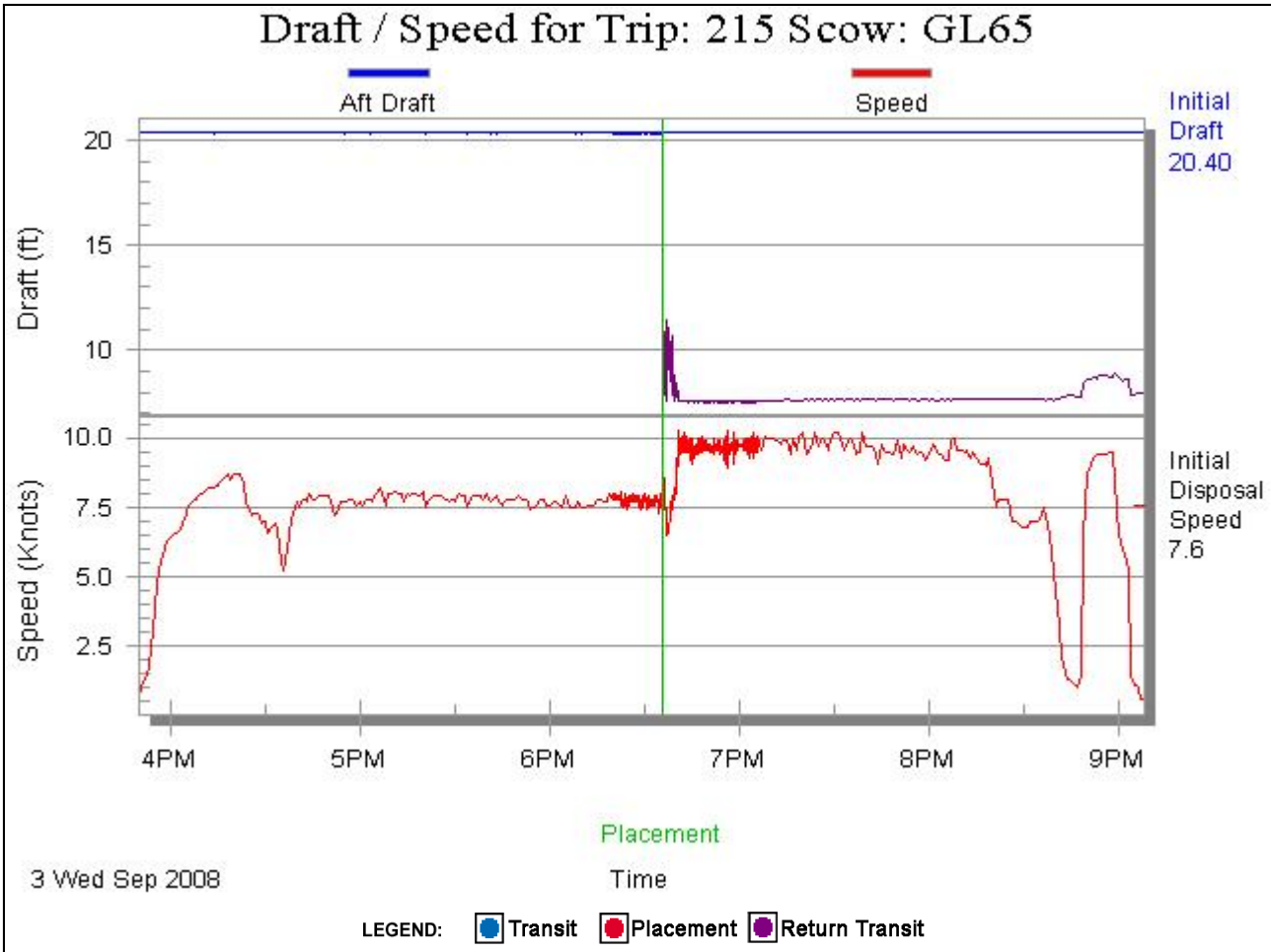

Trip Information

Trip #:	215
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/3/2008 15:49:47
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	9/3/2008 18:35:33	**Time:**	9/3/2008 18:35:46
Latitude:	42.428696	**Latitude:**	42.428908
Longitude:	-70.581694	**Longitude:**	-70.581099
Aft Draft:	20.32 ft	**Aft Draft:**	8.44 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090408_140446

2008 Boston Harbor Maintenance Dredging
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Trip Information:

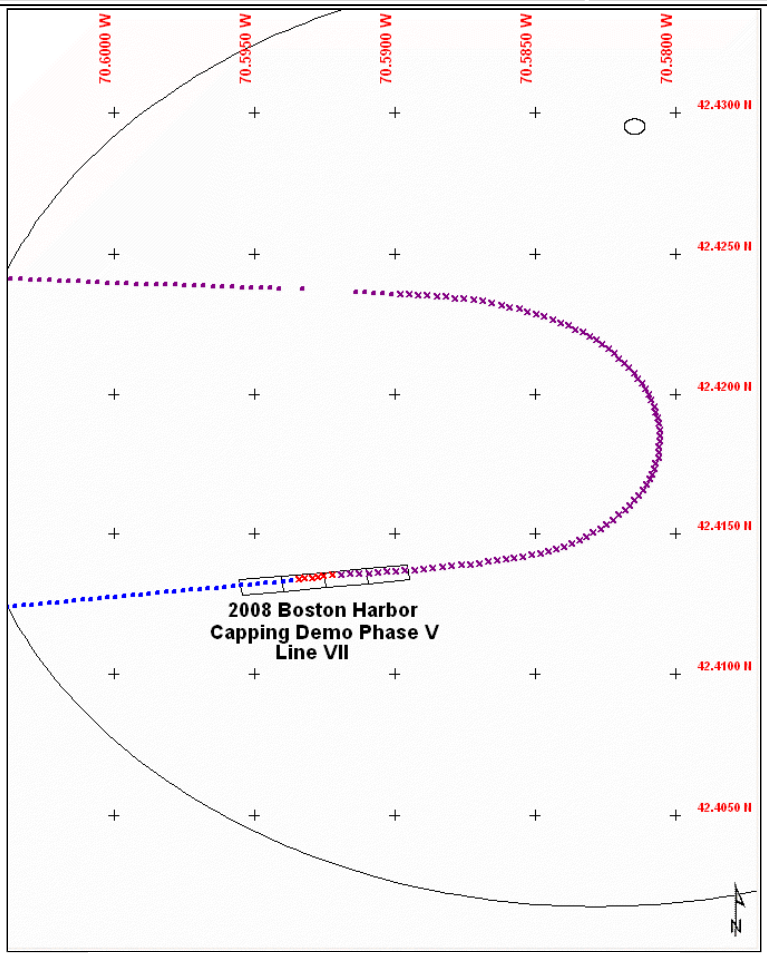
Trip #:	216
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/3/2008 22:01:14
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/4/2008 00:41:49	**Time:**	9/4/2008 00:42:12
Lat:	42.413381	**Lat:**	42.413525
Long:	-70.593419	**Long:**	-70.592245
Aft Draft:	18.53 ft	**Aft Draft:**	10.99 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/3/2008 8:58:00 PM (Local)
Wave Height: 4.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090408_140201

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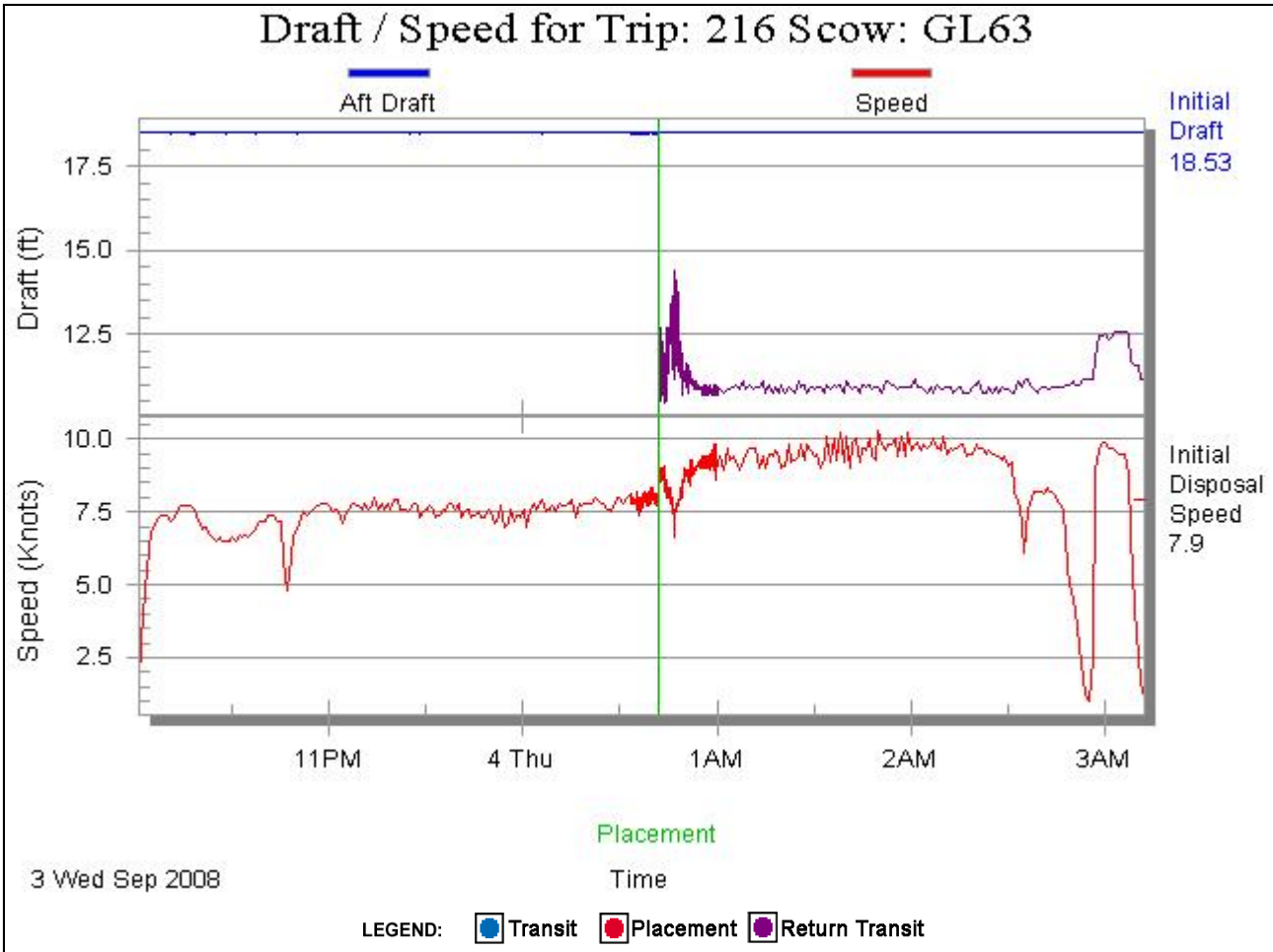

Trip Information

Trip #:	216
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/3/2008 22:01:14
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/4/2008 00:41:49
Latitude:	42.413381
Longitude:	-70.593419
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/4/2008 00:42:12
Latitude:	42.413525
Longitude:	-70.592245
Aft Draft:	10.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090408_140201

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

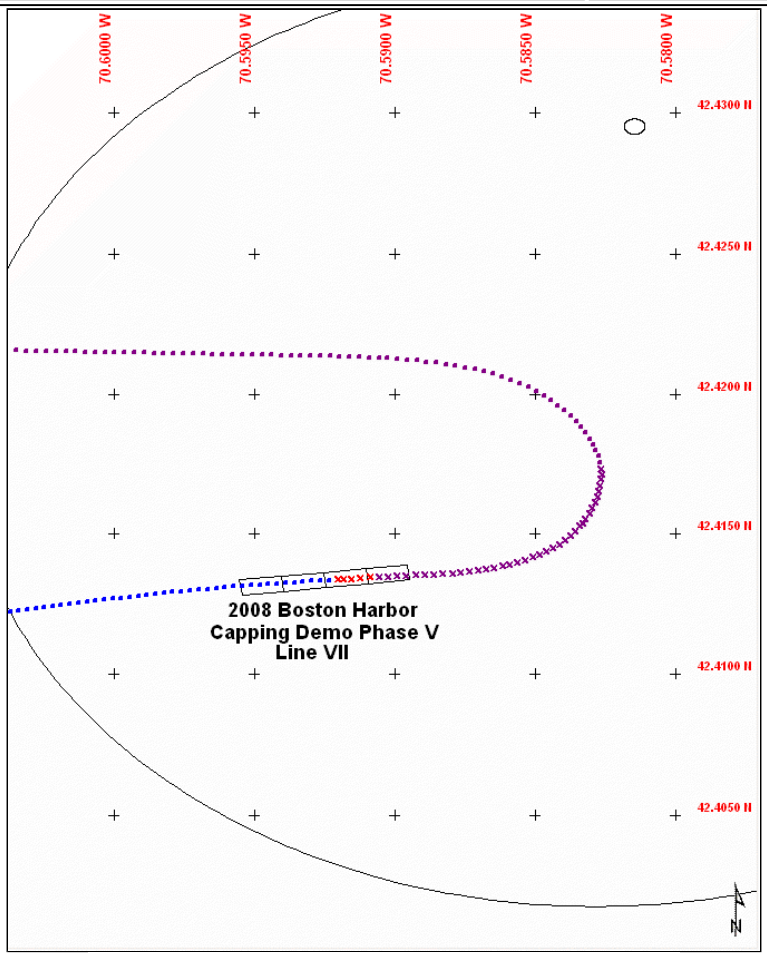
Trip #:	217
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/4/2008 04:07:45
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/4/2008 06:44:15	**Time:**	9/4/2008 06:44:36
Lat:	42.413373	**Lat:**	42.413444
Long:	-70.592058	**Long:**	-70.590905
Aft Draft:	20.32 ft	**Aft Draft:**	9.99 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/4/2008 3:49:00 AM (Local)
Wave Height: 3.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090408_140417

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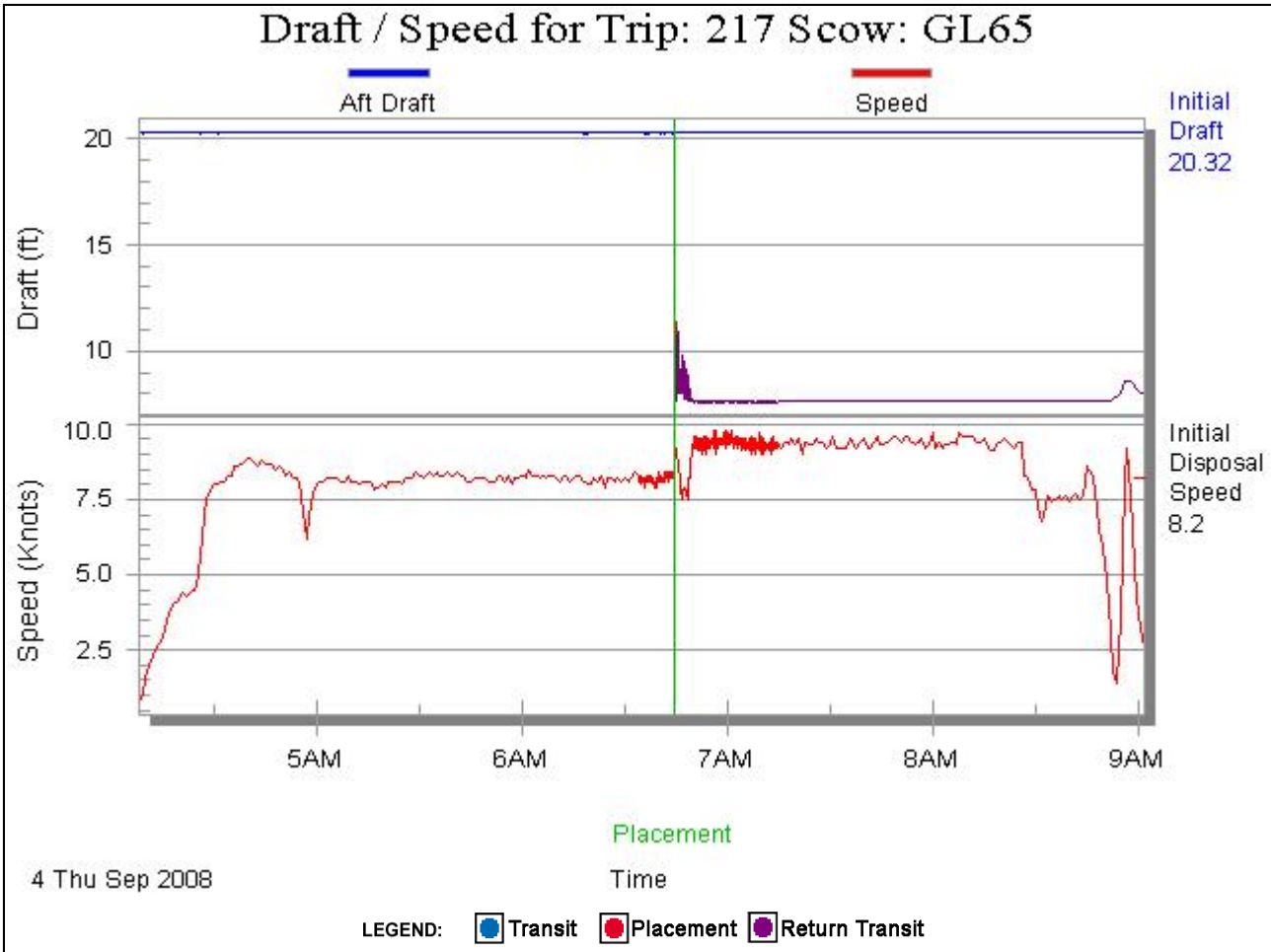

Trip Information

Trip #:	217
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/4/2008 04:07:45
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/4/2008 06:44:15
Latitude:	42.413373
Longitude:	-70.592058
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/4/2008 06:44:36
Latitude:	42.413444
Longitude:	-70.590905
Aft Draft:	9.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090408_140417

2008 Boston Harbor Maintenance Dredging
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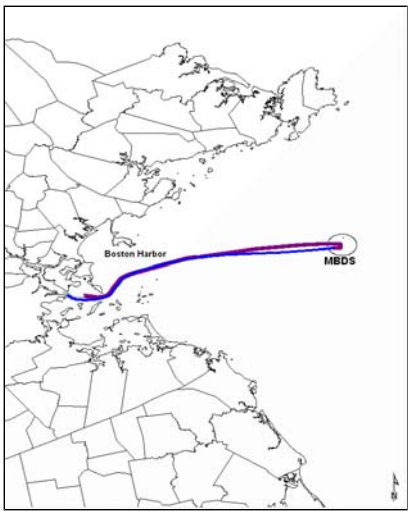
Trip Information:

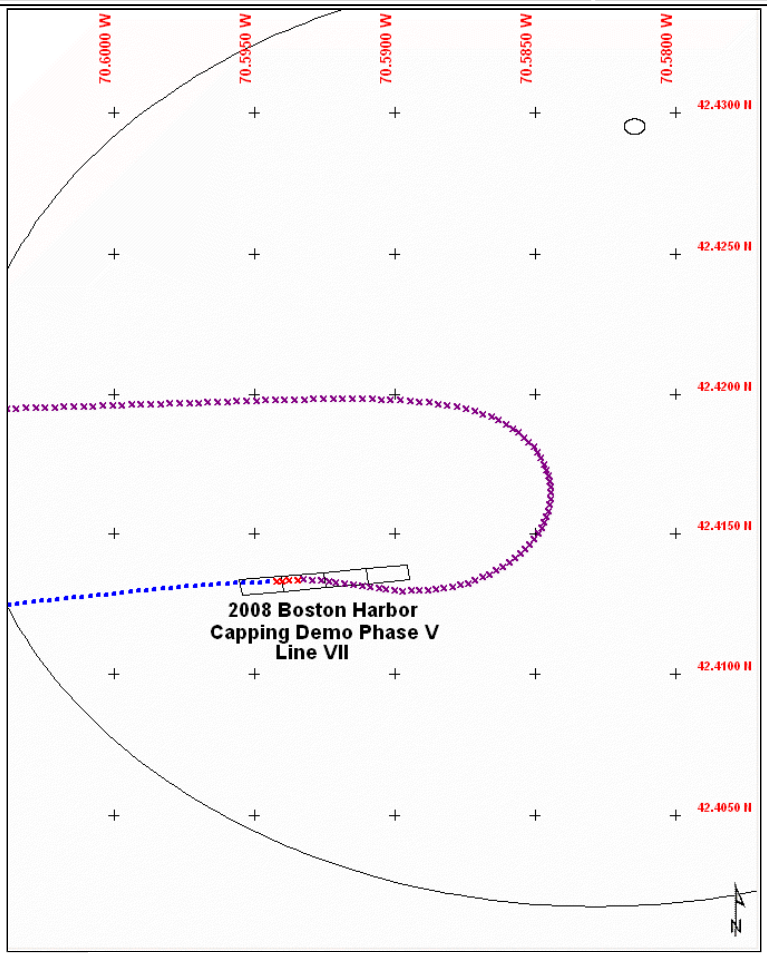
Trip #:	218
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/4/2008 11:06:01
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/4/2008 13:58:25	9/4/2008 13:58:40
Lat:	42.413305	42.413351
Long:	-70.594231	-70.593481
Aft Draft:	18.61 ft	11.63 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/4/2008 10:16:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL63 returned to the dredge location while open. SAIC contacted the inspector on-board the tug Lemmerhirt who confirmed that the scow returned while open due to mechanical problems.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090508_104208

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2008 Boston Harbor Maintenance Dredging
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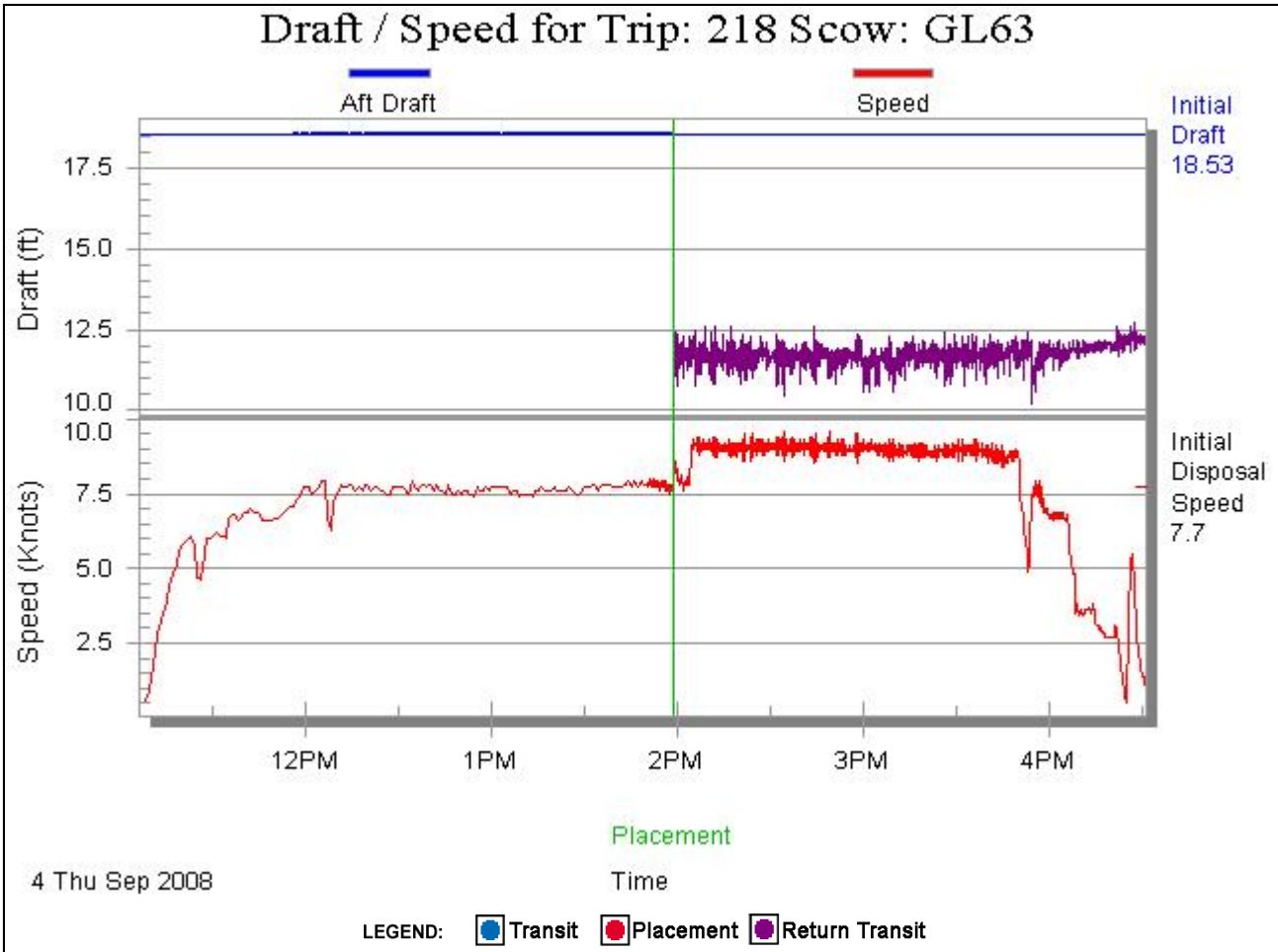

Trip Information

Trip #:	218
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/4/2008 11:06:01
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/4/2008 13:58:25	**Time:**	9/4/2008 13:58:40
Latitude:	42.413305	**Latitude:**	42.413351
Longitude:	-70.594231	**Longitude:**	-70.593481
Aft Draft:	18.61 ft	**Aft Draft:**	11.63 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL63 returned to the dredge location while open. SAIC contacted the inspector on-board the tug Lemmerhirt who confirmed that the scow returned while open due to mechanical problems.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090508_104208

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Trip Information:

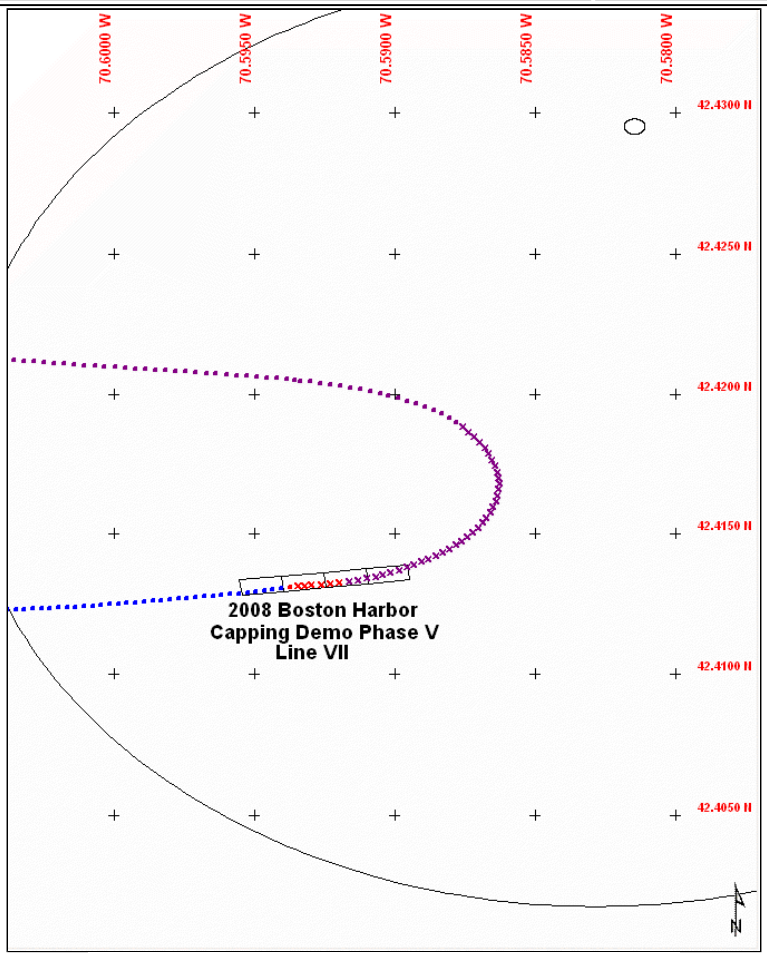
Trip #:	219
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/4/2008 17:45:51
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/4/2008 20:23:21	**Time:**	9/4/2008 20:23:54
Lat:	42.413090	**Lat:**	42.413264
Long:	-70.593755	**Long:**	-70.591986
Aft Draft:	20.40 ft	**Aft Draft:**	7.99 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/4/2008 5:45:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090508_104615

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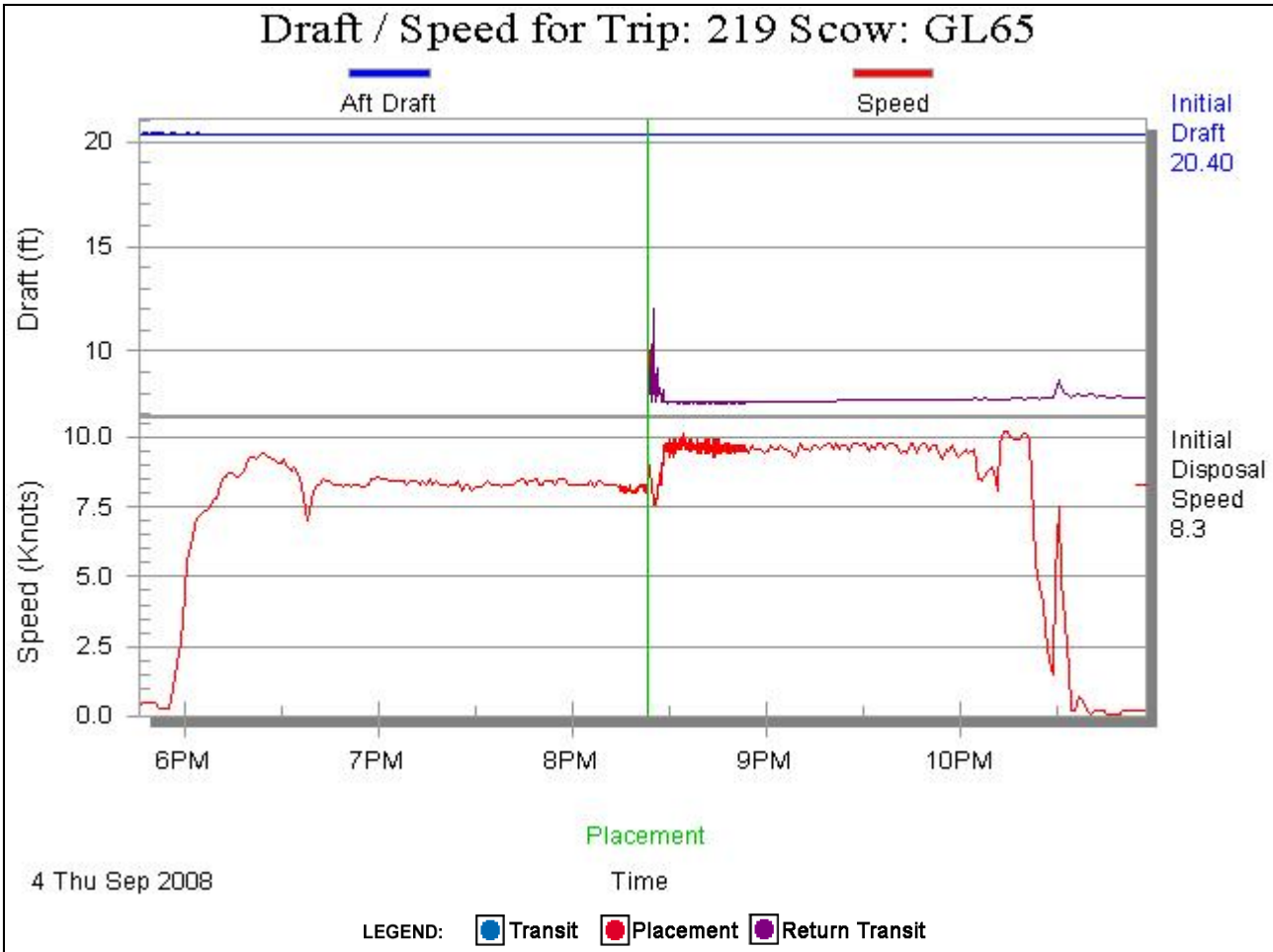

Trip Information

Trip #:	219
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/4/2008 17:45:51
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/4/2008 20:23:21
Latitude:	42.413090
Longitude:	-70.593755
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/4/2008 20:23:54
Latitude:	42.413264
Longitude:	-70.591986
Aft Draft:	7.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090508_104615

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Trip Information:

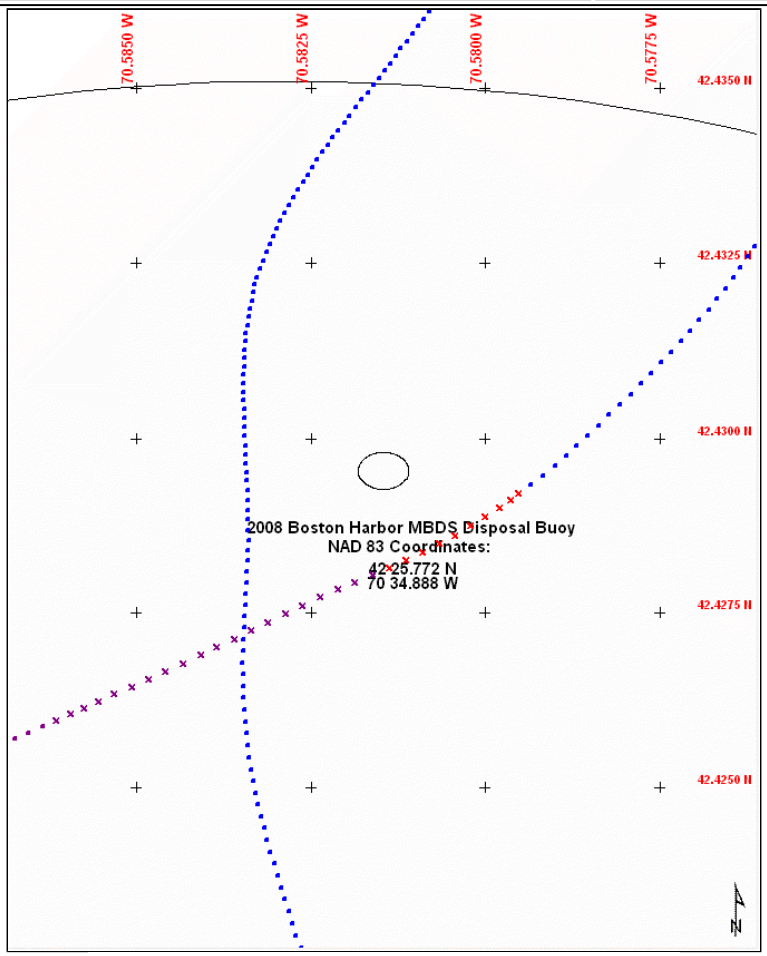
Trip #:	220
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/5/2008 01:43:33
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/5/2008 05:13:55	**Time:**	9/5/2008 05:14:46
Lat:	42.429196	**Lat:**	42.428139
Long:	-70.579524	**Long:**	-70.581378
Aft Draft:	18.53 ft	**Aft Draft:**	11.15 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/5/2008 4:21:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090508_104940

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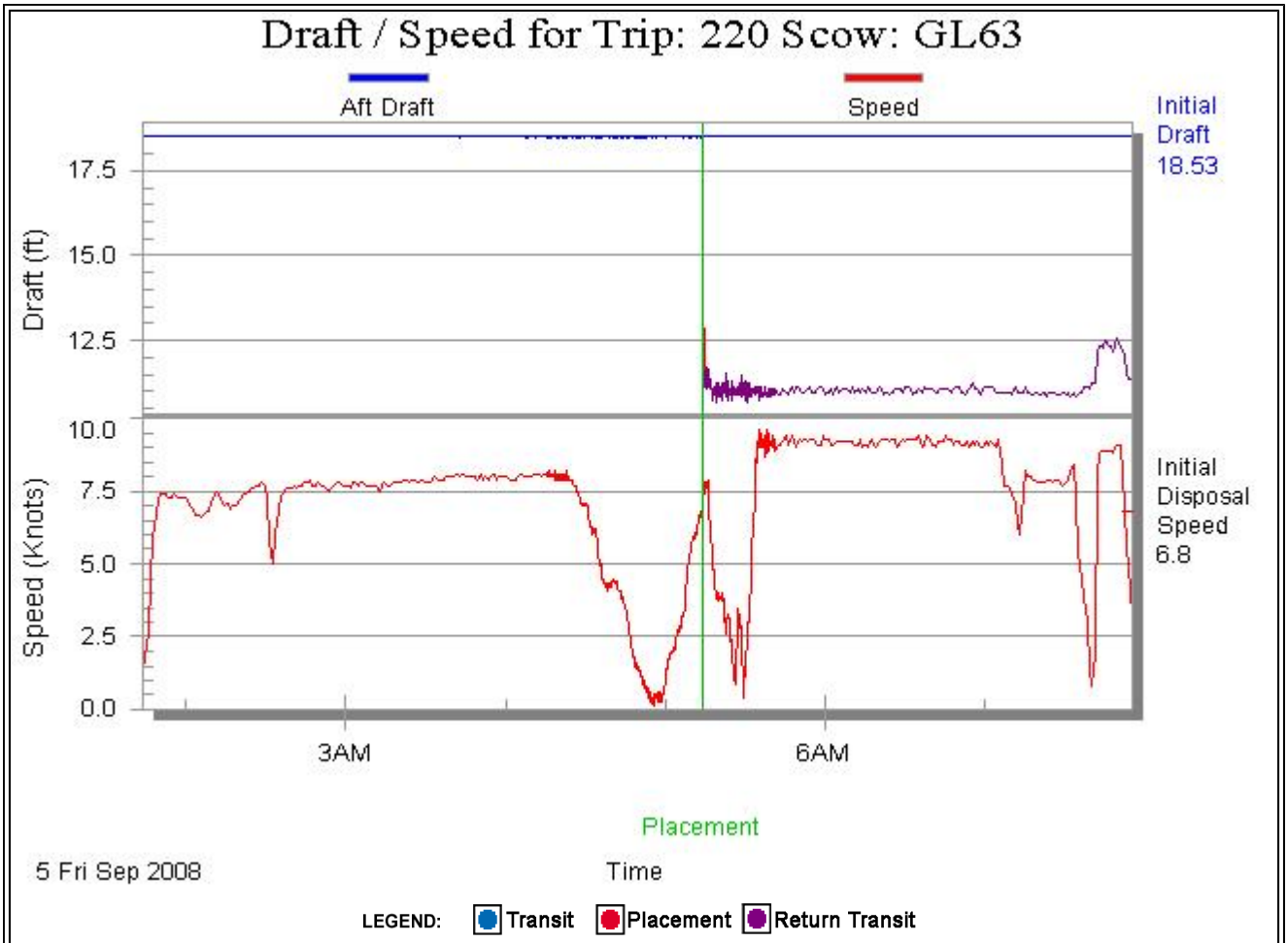

Trip Information

Trip #:	220
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/5/2008 01:43:33
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/5/2008 05:13:55
Latitude:	42.429196
Longitude:	-70.579524
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/5/2008 05:14:46
Latitude:	42.428139
Longitude:	-70.581378
Aft Draft:	11.15 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090508_104940

2008 Boston Harbor Maintenance Dredging
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Trip Information:

Trip #:	221
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/5/2008 08:19:47
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

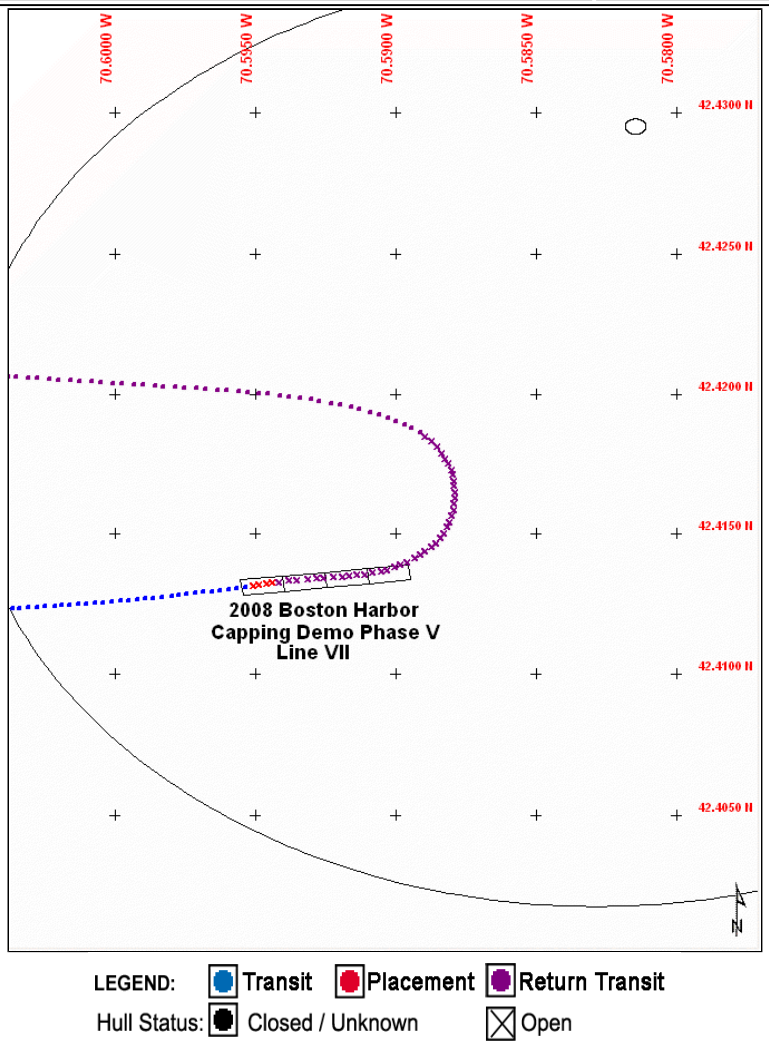
Placement Start:		**Placement End:**	
Time:	9/5/2008 10:57:56	**Time:**	9/5/2008 10:58:09
Lat:	42.413158	**Lat:**	42.413252
Long:	-70.595089	**Long:**	-70.594411
Aft Draft:	20.32 ft	**Aft Draft:**	8.44 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Wave Information Recorded: 9/5/2008 8:17:00 AM (Local)

Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090808_120851

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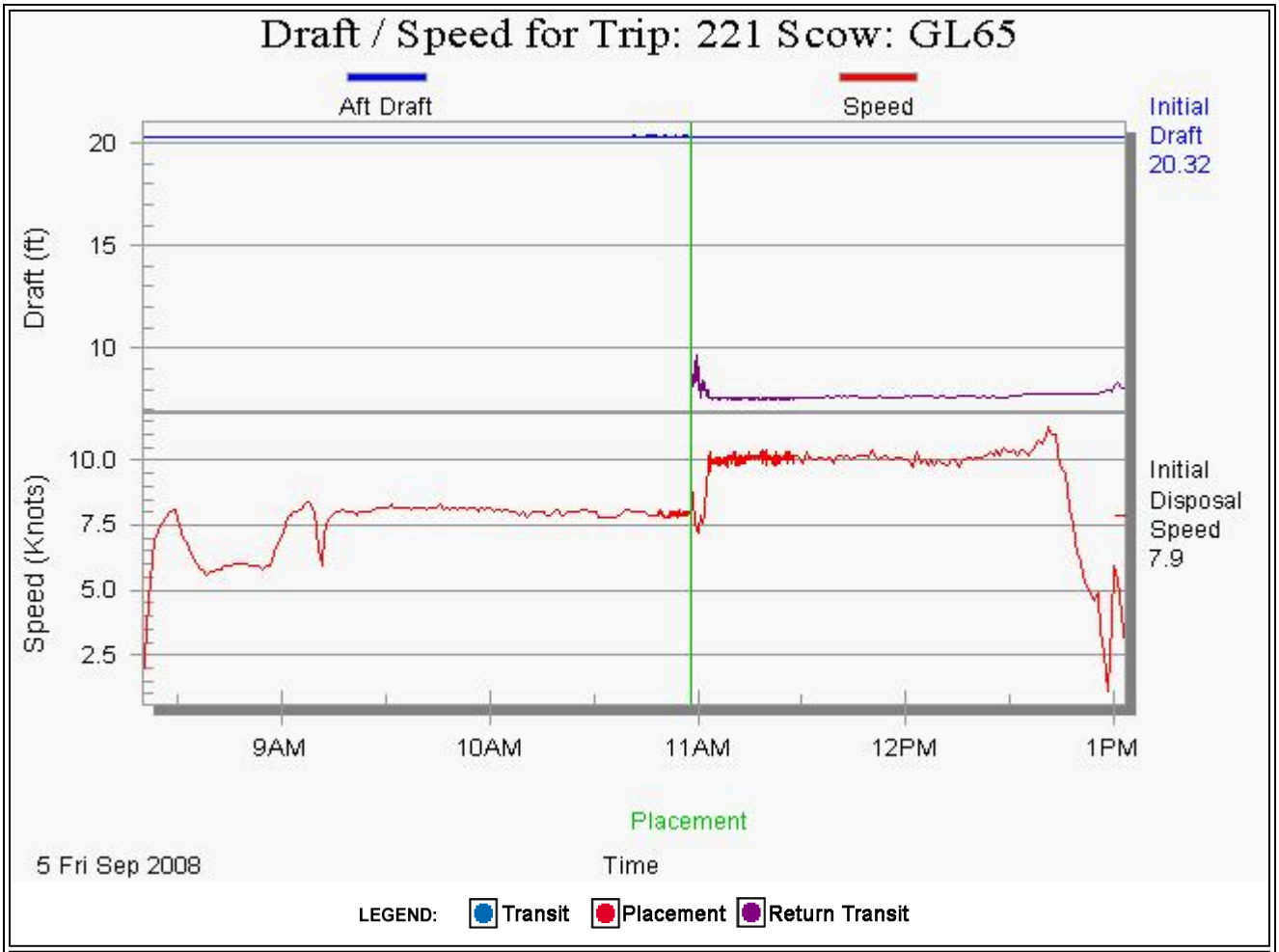


Trip Information

Trip #:	221
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/5/2008 08:19:47
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/5/2008 10:57:56
Latitude:	42.413158
Longitude:	-70.595089
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/5/2008 10:58:09
Latitude:	42.413252
Longitude:	-70.594411
Aft Draft:	8.44 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090808_120851

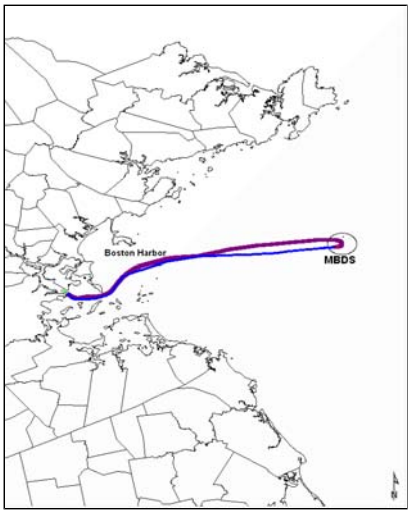
2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

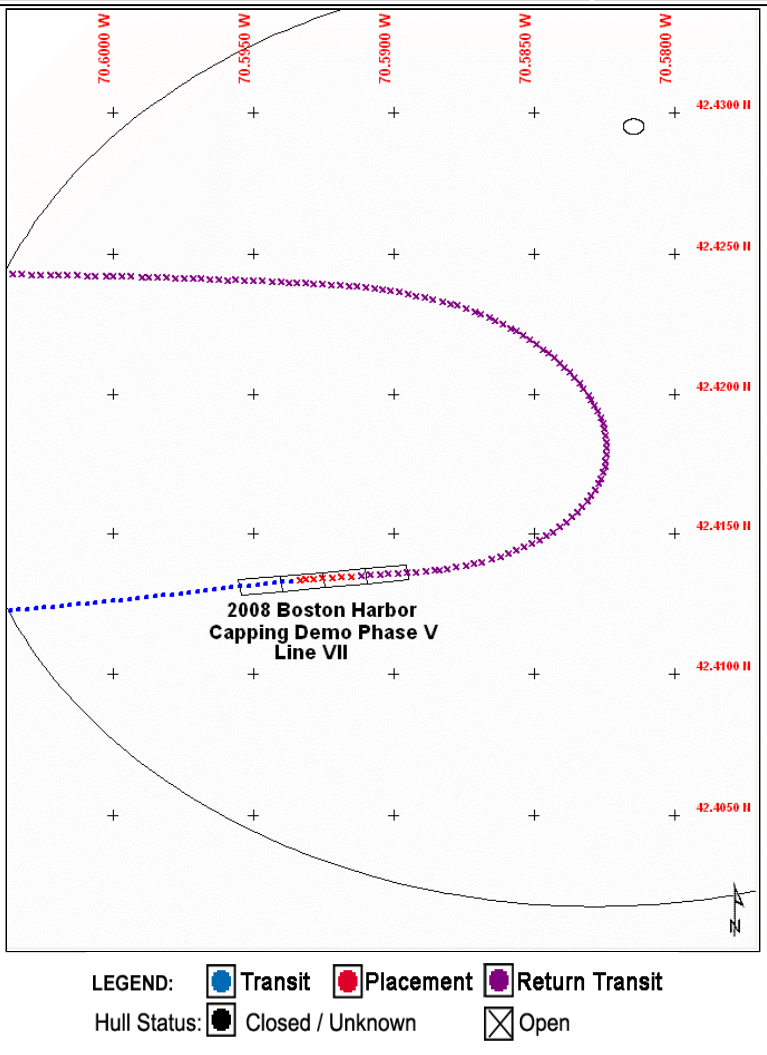
Trip #:	222
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/5/2008 14:02:05
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/5/2008 17:03:07	**Time:**	9/5/2008 17:03:40
Lat:	42.413347	**Lat:**	42.413476
Long:	-70.593349	**Long:**	-70.591526
Aft Draft:	18.61 ft	**Aft Draft:**	10.75 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/5/2008 1:57:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090808_121916

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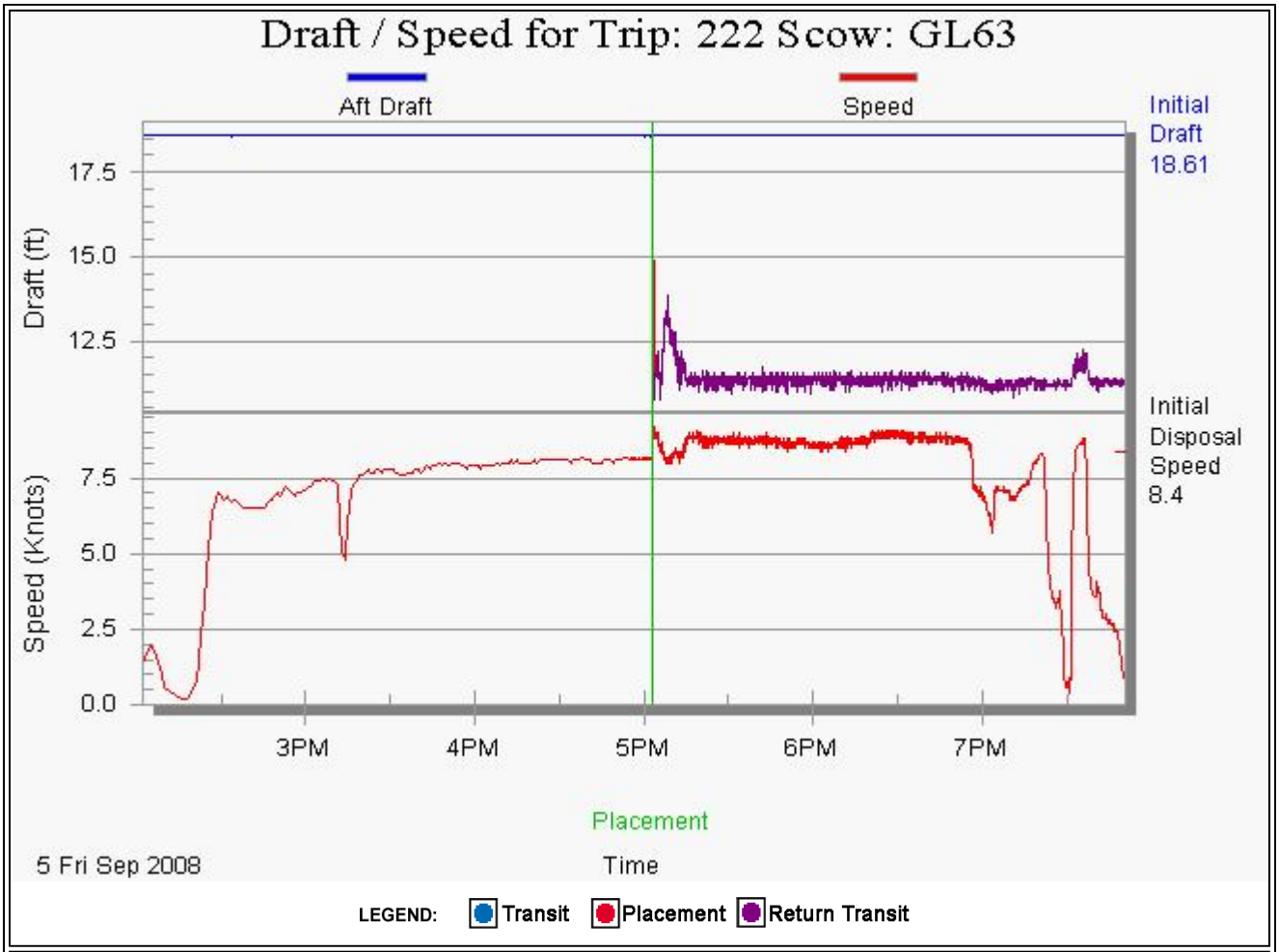


Trip Information

Trip #:	222
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/5/2008 14:02:05
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/5/2008 17:03:07
Latitude:	42.413347
Longitude:	-70.593349
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/5/2008 17:03:40
Latitude:	42.413476
Longitude:	-70.591526
Aft Draft:	10.75 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090808_121916

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

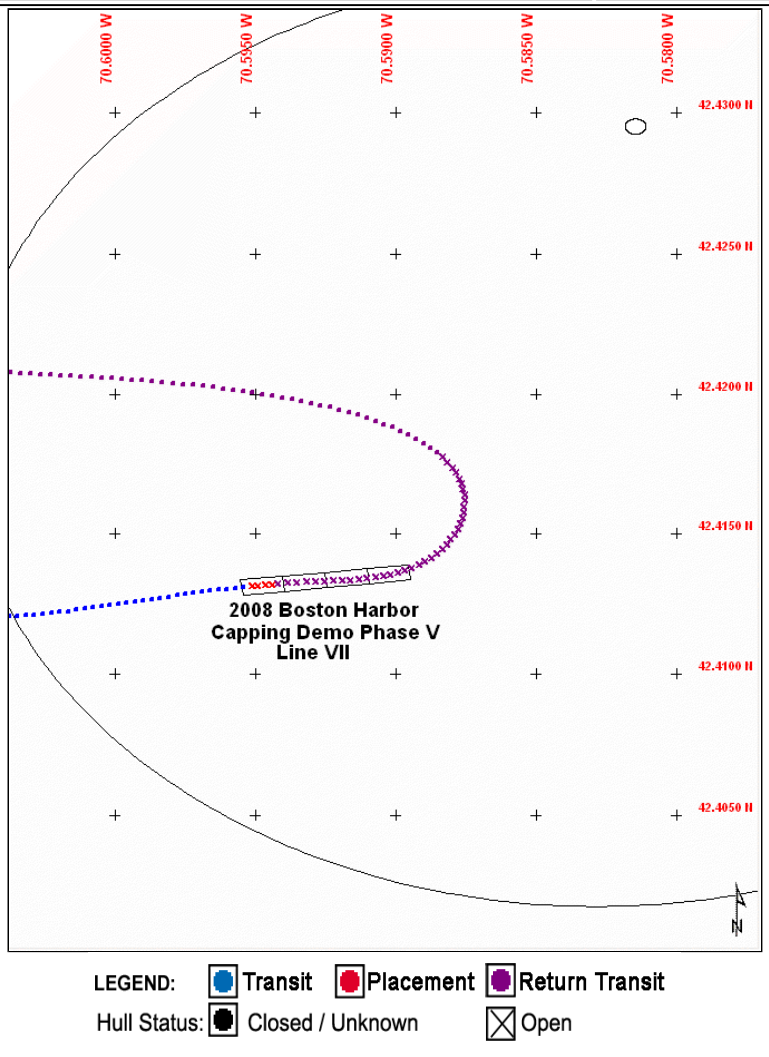
Trip #:	223
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	9/5/2008 20:34:09
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/5/2008 23:14:44	**Time:**	9/5/2008 23:14:57
Lat:	42.413136	**Lat:**	42.413203
Long:	-70.595133	**Long:**	-70.594432
Aft Draft:	20.32 ft	**Aft Draft:**	7.99 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/5/2008 7:57:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090808_124002

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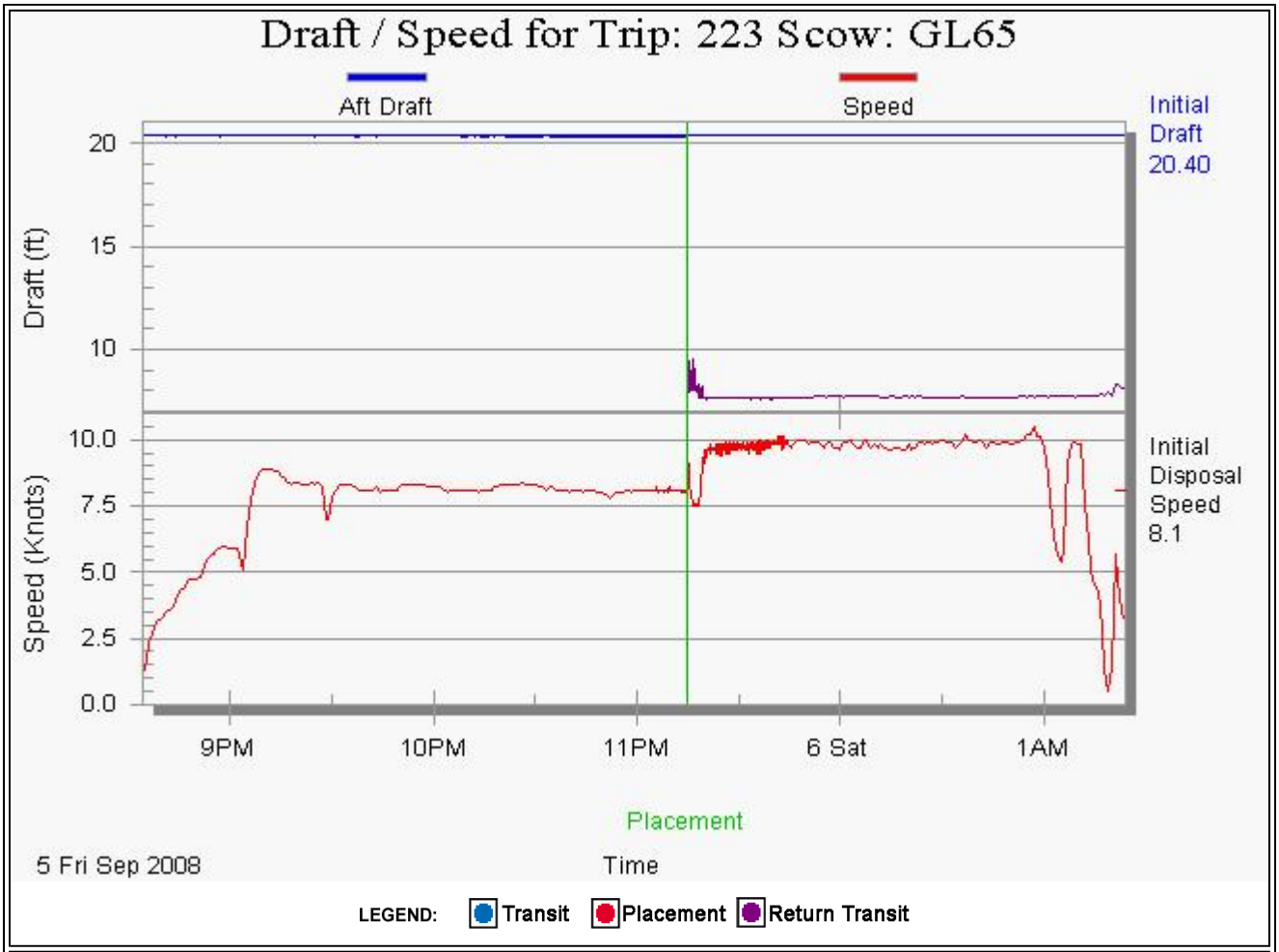


Trip Information

Trip #:	223
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	9/5/2008 20:34:09
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/5/2008 23:14:44
Latitude:	42.413136
Longitude:	-70.595133
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/5/2008 23:14:57
Latitude:	42.413203
Longitude:	-70.594432
Aft Draft:	7.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090808_124002

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

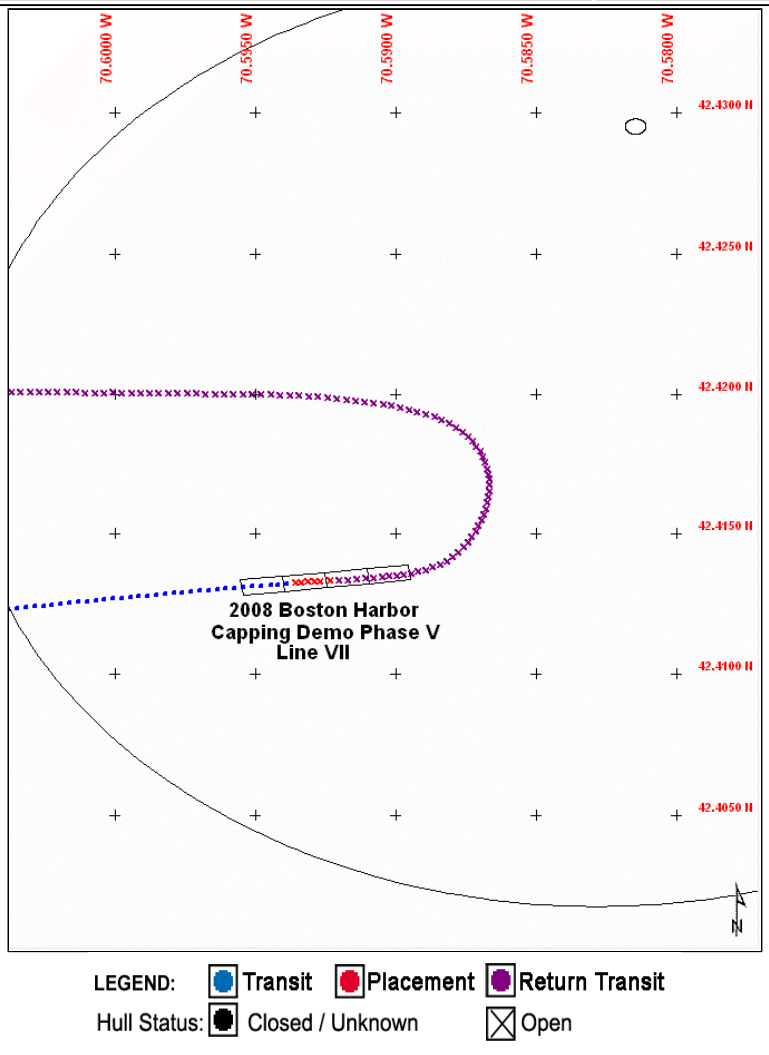
Trip #:	224
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/6/2008 05:29:51
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/6/2008 08:03:24	**Time:**	9/6/2008 08:03:47
Lat:	42.413250	**Lat:**	42.413336
Long:	-70.593603	**Long:**	-70.592380
Aft Draft:	18.53 ft	**Aft Draft:**	12.10 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/6/2008 5:21:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090808_124438

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W912WJ-07-C-0023

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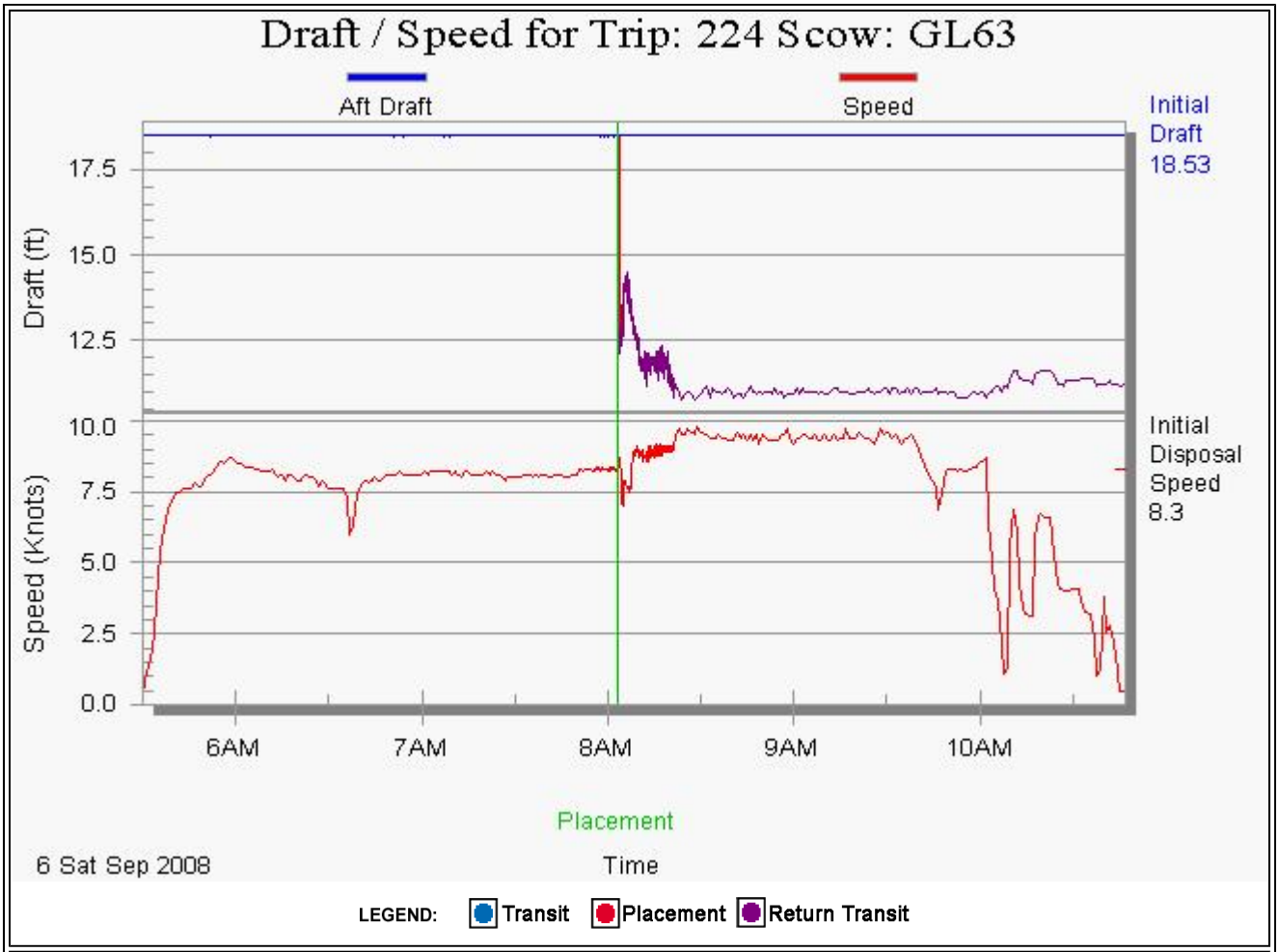


Trip Information

Trip #:	224
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/6/2008 05:29:51
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/6/2008 08:03:24
Latitude:	42.413250
Longitude:	-70.593603
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/6/2008 08:03:47
Latitude:	42.413336
Longitude:	-70.592380
Aft Draft:	12.10 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090808_124438

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

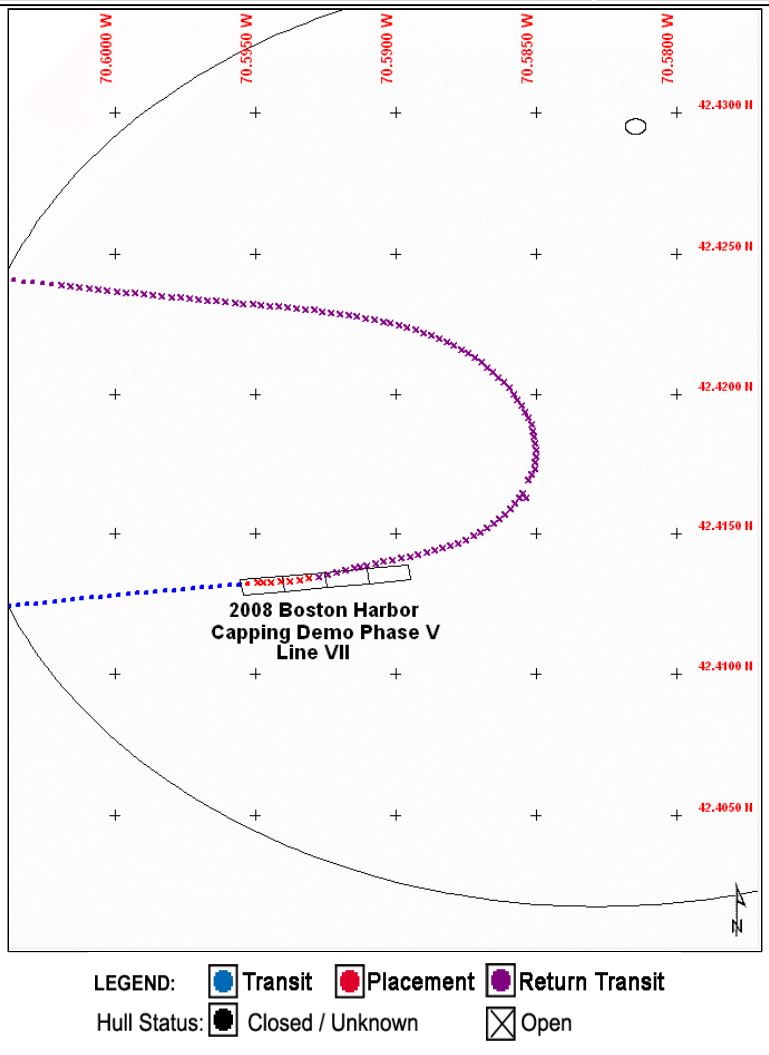
Trip #:	225
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	3975 cu yd
Start Time:	9/6/2008 11:06:56
Init Aft Draft:	18.55 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/6/2008 13:30:20	**Time:**	9/6/2008 13:30:59
Lat:	42.413228	**Lat:**	42.413412
Long:	-70.595279	**Long:**	-70.593105
Aft Draft:	17.37 ft	**Aft Draft:**	8.44 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/6/2008 10:58:00 AM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 090808_124816

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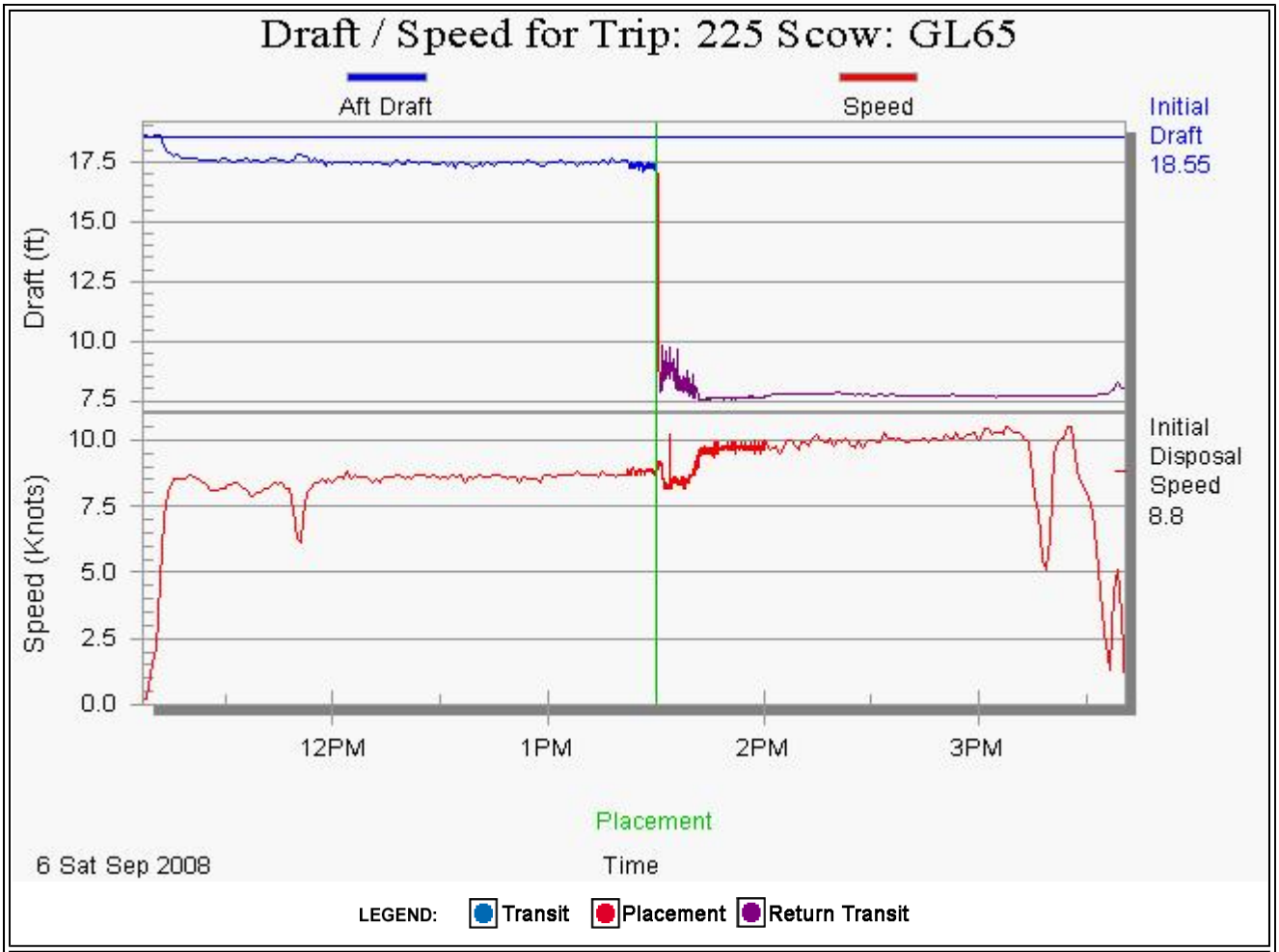


Trip Information

Trip #:	225
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	3975 cu yd
Start Time:	9/6/2008 11:06:56
Init Aft Draft:	18.55 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/6/2008 13:30:20
Latitude:	42.413228
Longitude:	-70.595279
Aft Draft:	17.37 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/6/2008 13:30:59
Latitude:	42.413412
Longitude:	-70.593105
Aft Draft:	8.44 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 090808_124816

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

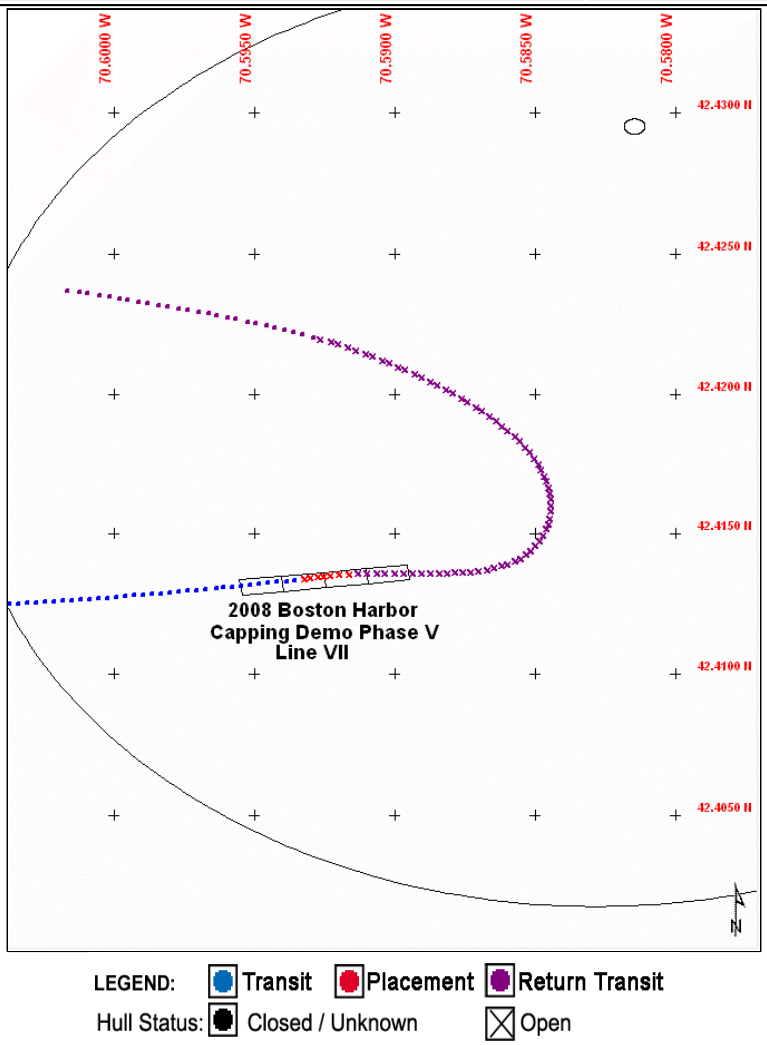
Trip #:	226
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/14/2008 20:49:07
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/14/2008 23:33:16	9/14/2008 23:33:45
Lat:	42.413388	42.413548
Long:	-70.593245	-70.591661
Aft Draft:	18.53 ft	11.55 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/14/2008 8:32:00 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091508_170311

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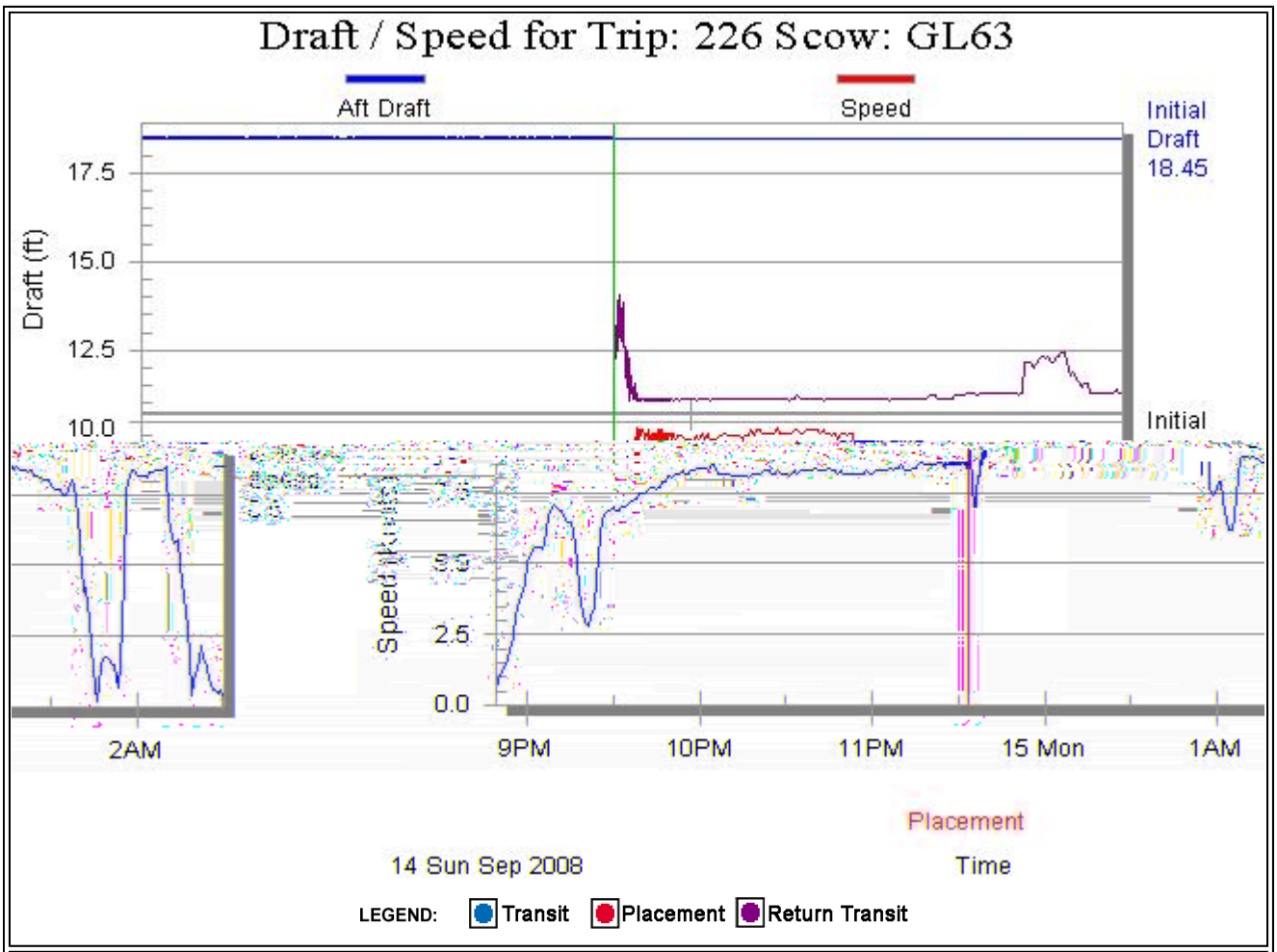


Trip Information

Trip #:	226
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/14/2008 20:49:07
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/14/2008 23:33:16
Latitude:	42.413388
Longitude:	-70.593245
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/14/2008 23:33:45
Latitude:	42.413548
Longitude:	-70.591661
Aft Draft:	11.55 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091508_170311

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

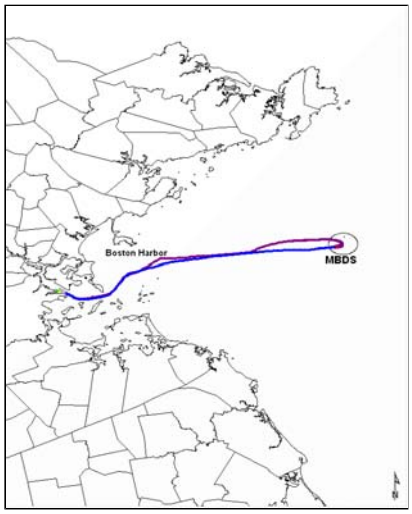
Trip Information:

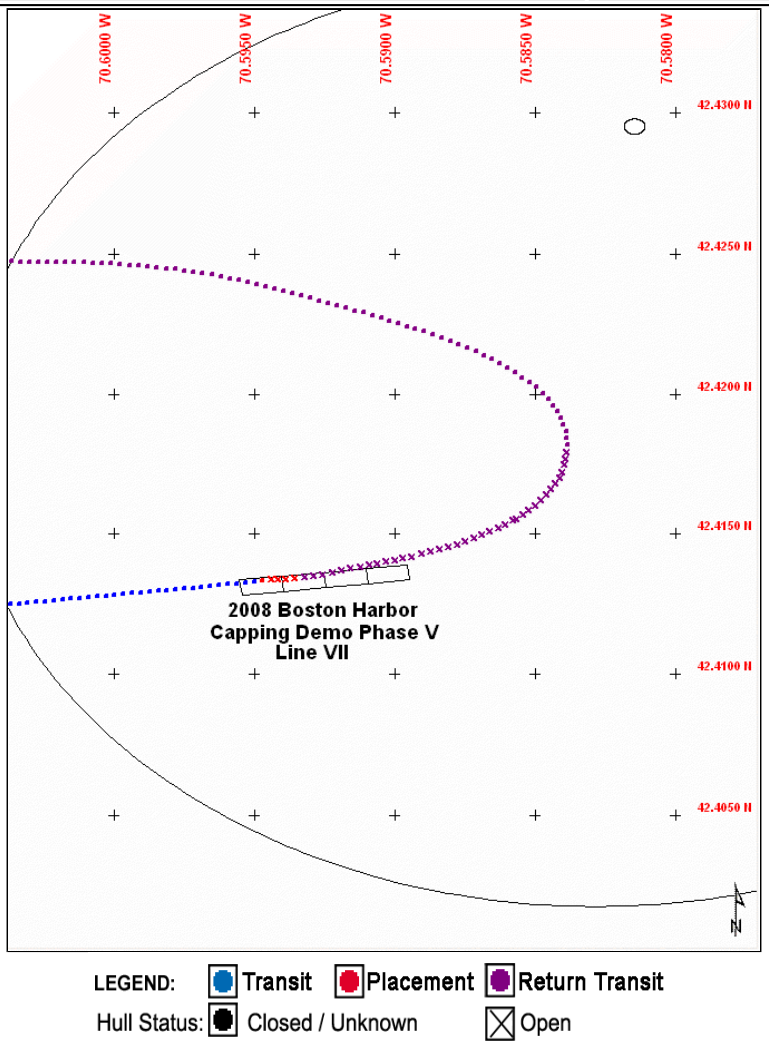
Trip #:	227
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/15/2008 02:49:30
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/15/2008 05:24:10	**Time:**	9/15/2008 05:24:31
Lat:	42.413343	**Lat:**	42.413408
Long:	-70.594716	**Long:**	-70.593575
Aft Draft:	20.32 ft	**Aft Draft:**	8.29 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/15/2008 2:43:00 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091508_165707

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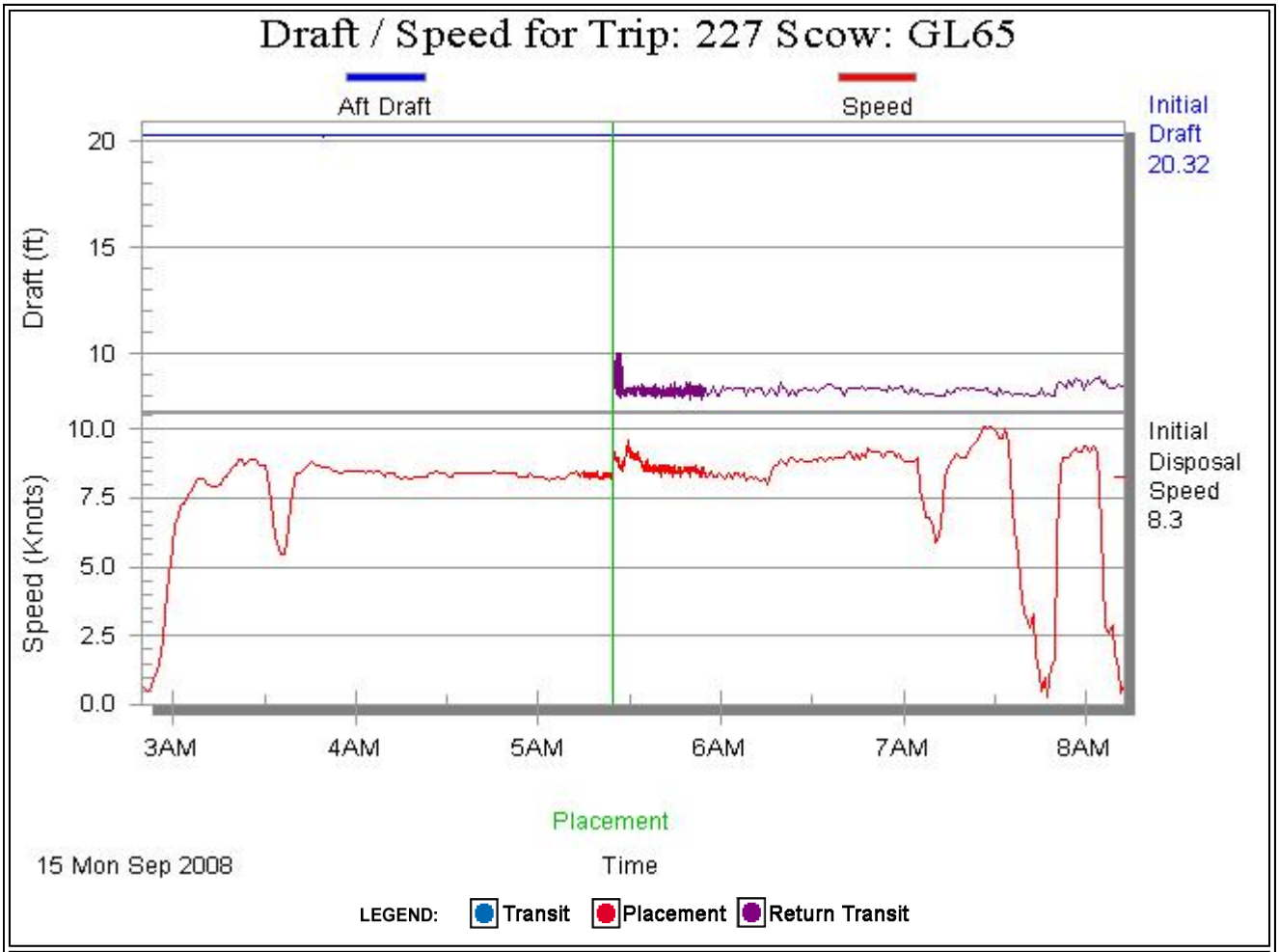


Trip Information

Trip #:	227
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/15/2008 02:49:30
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/15/2008 05:24:10	**Time:**	9/15/2008 05:24:31
Latitude:	42.413343	**Latitude:**	42.413408
Longitude:	-70.594716	**Longitude:**	-70.593575
Aft Draft:	20.32 ft	**Aft Draft:**	8.29 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091508_165707

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

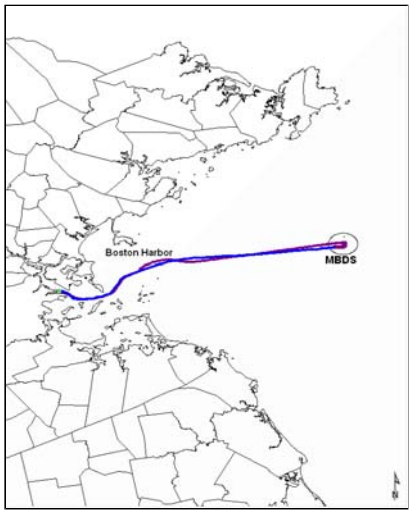
Trip Information:

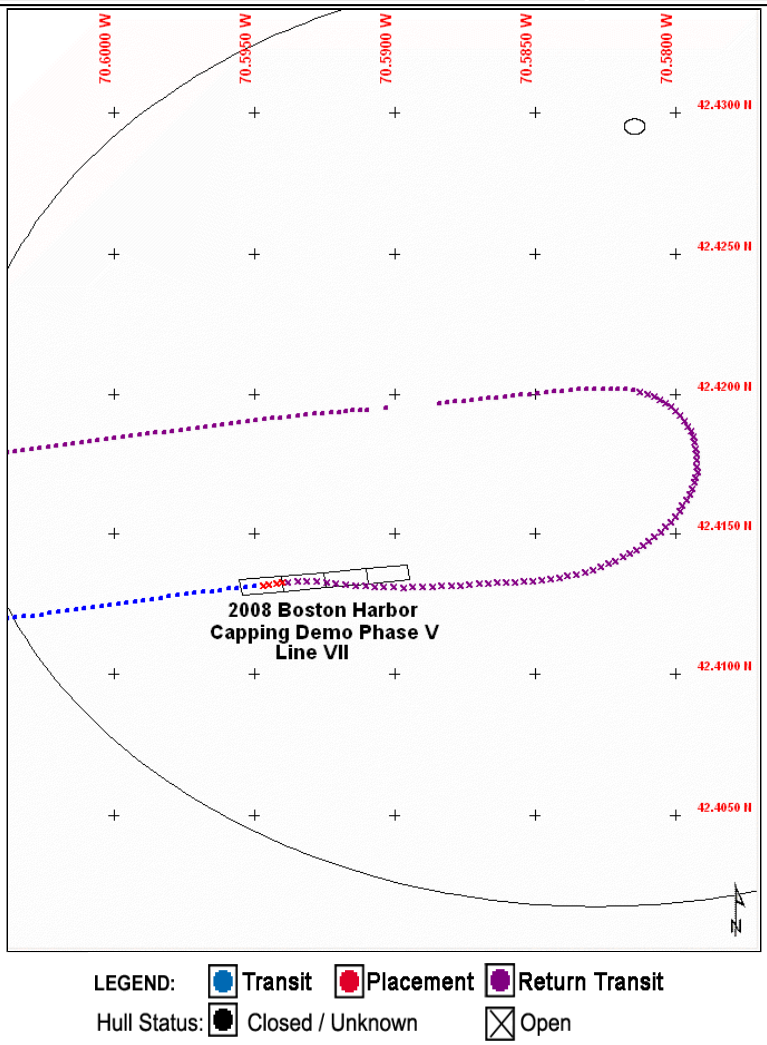
Trip #:	228
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/15/2008 09:09:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/15/2008 12:02:22	9/15/2008 12:02:35
Lat:	42.413164	42.413249
Long:	-70.594701	-70.594022
Aft Draft:	18.53 ft	11.94 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/15/2008 8:50:00 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091508_165653

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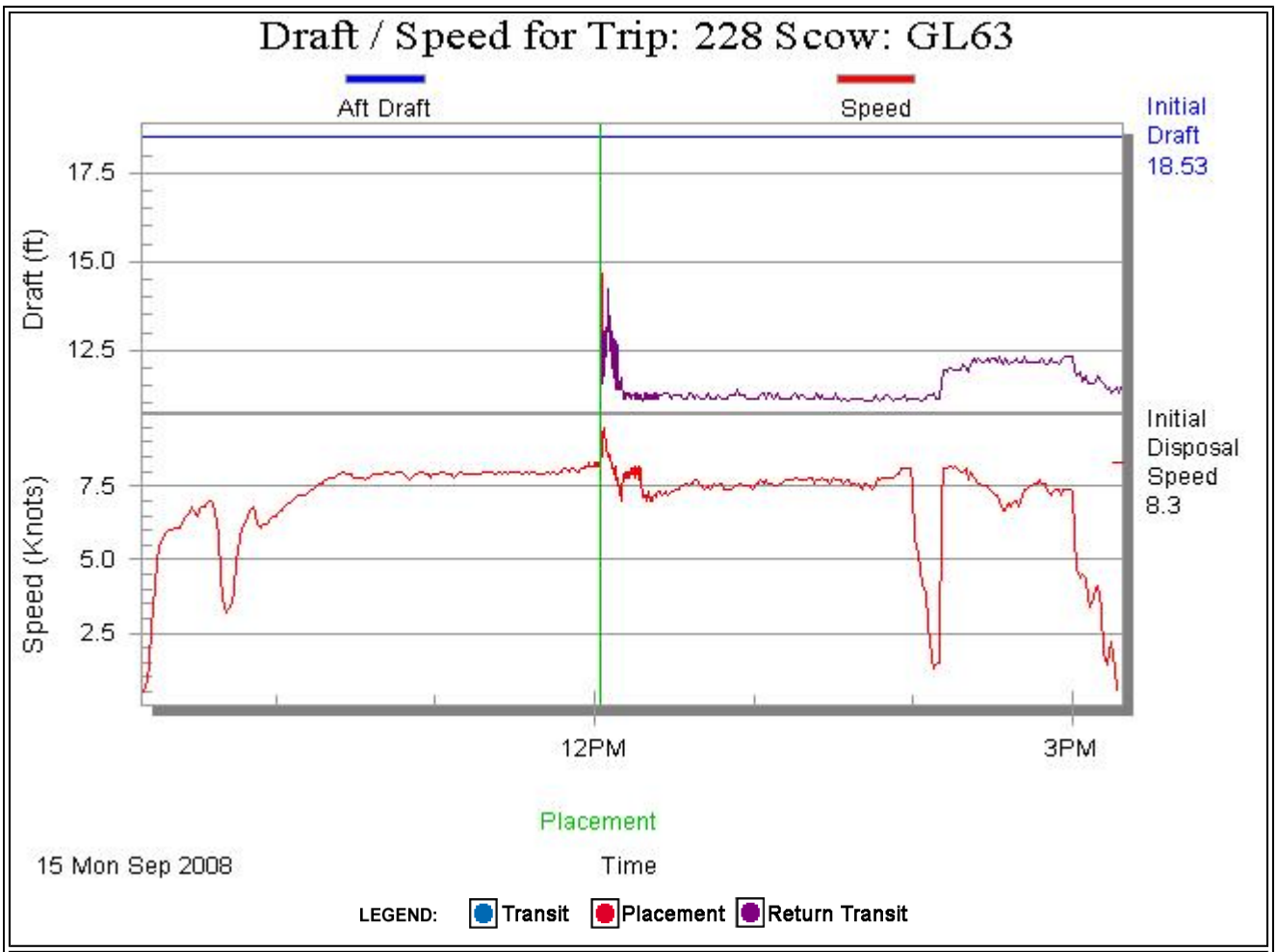


Trip Information

Trip #:	228
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/15/2008 09:09:18
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/15/2008 12:02:22
Latitude:	42.413164
Longitude:	-70.594701
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/15/2008 12:02:35
Latitude:	42.413249
Longitude:	-70.594022
Aft Draft:	11.94 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091508_165653

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

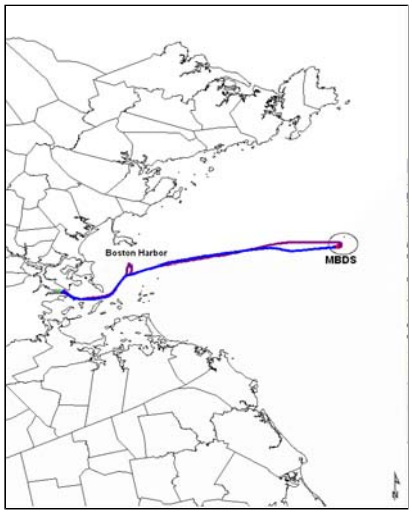
Trip Information:

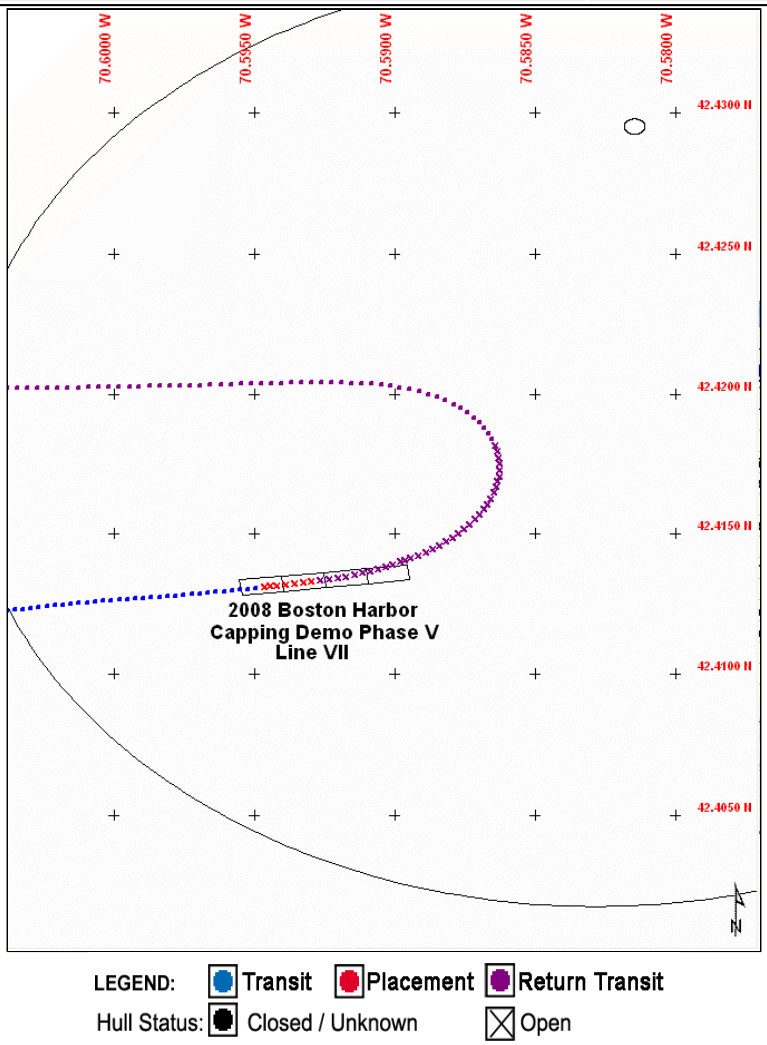
Trip #:	229
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/15/2008 15:26:27
Init Aft Draft:	20.47 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/15/2008 18:34:46	9/15/2008 18:35:19
Lat:	42.413109	42.413290
Long:	-70.594670	-70.592976
Aft Draft:	20.40 ft	8.95 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/15/2008 3:17:00 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091608_155421

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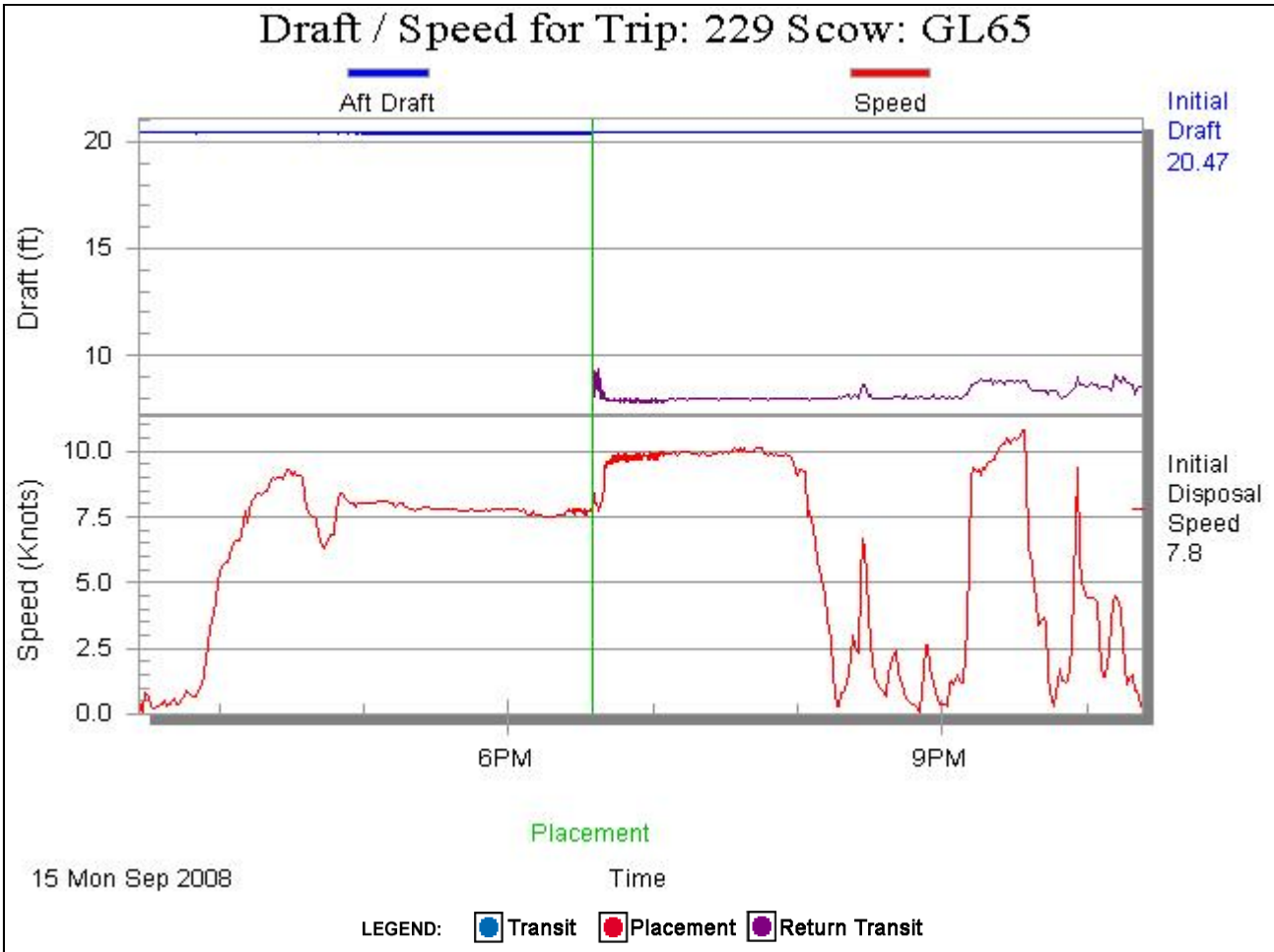


Trip Information

Trip #:	229
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/15/2008 15:26:27
Init Aft Draft:	20.47 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/15/2008 18:34:46
Latitude:	42.413109
Longitude:	-70.594670
Aft Draft:	20.40 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/15/2008 18:35:19
Latitude:	42.413290
Longitude:	-70.592976
Aft Draft:	8.95 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091608_155421

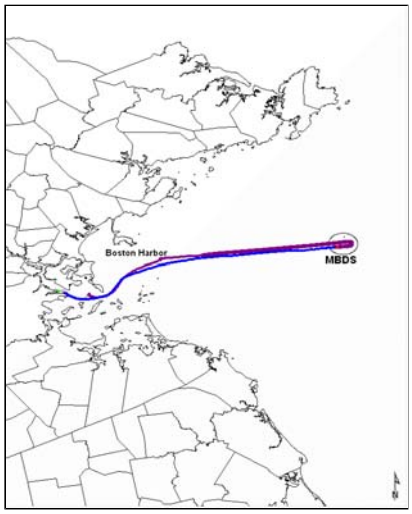
2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

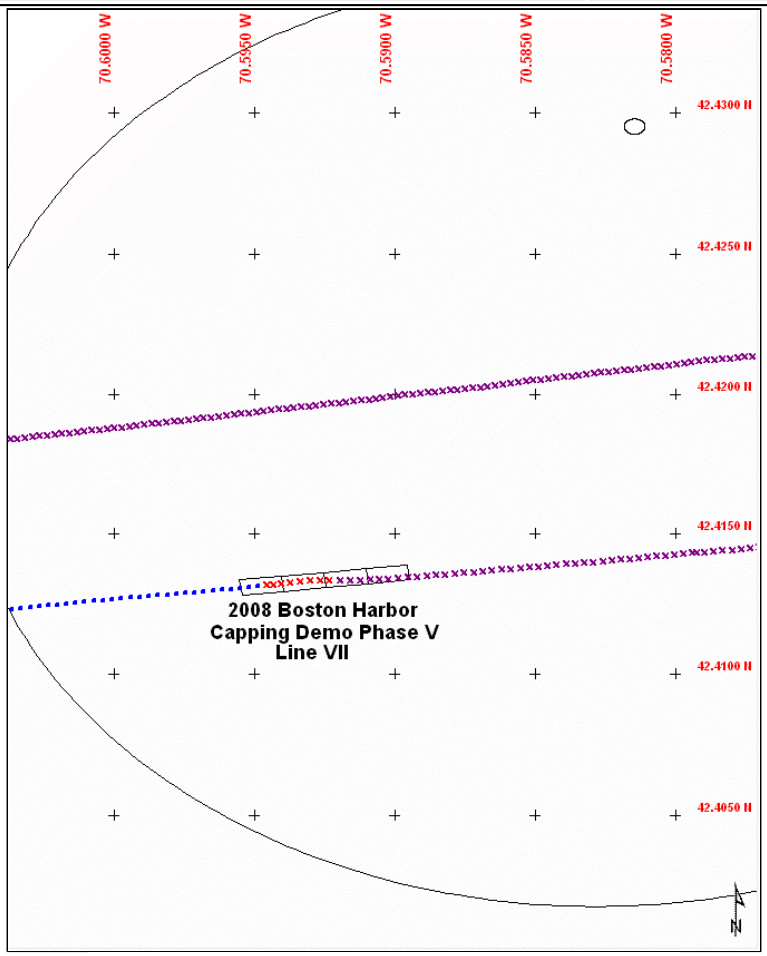
Trip #:	230
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/15/2008 22:48:42
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/16/2008 01:37:40	**Time:**	9/16/2008 01:38:19
Lat:	42.413179	**Lat:**	42.413355
Long:	-70.594556	**Long:**	-70.592338
Aft Draft:	18.53 ft	**Aft Draft:**	11.94 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/15/2008 10:28:00 PM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091608_114226

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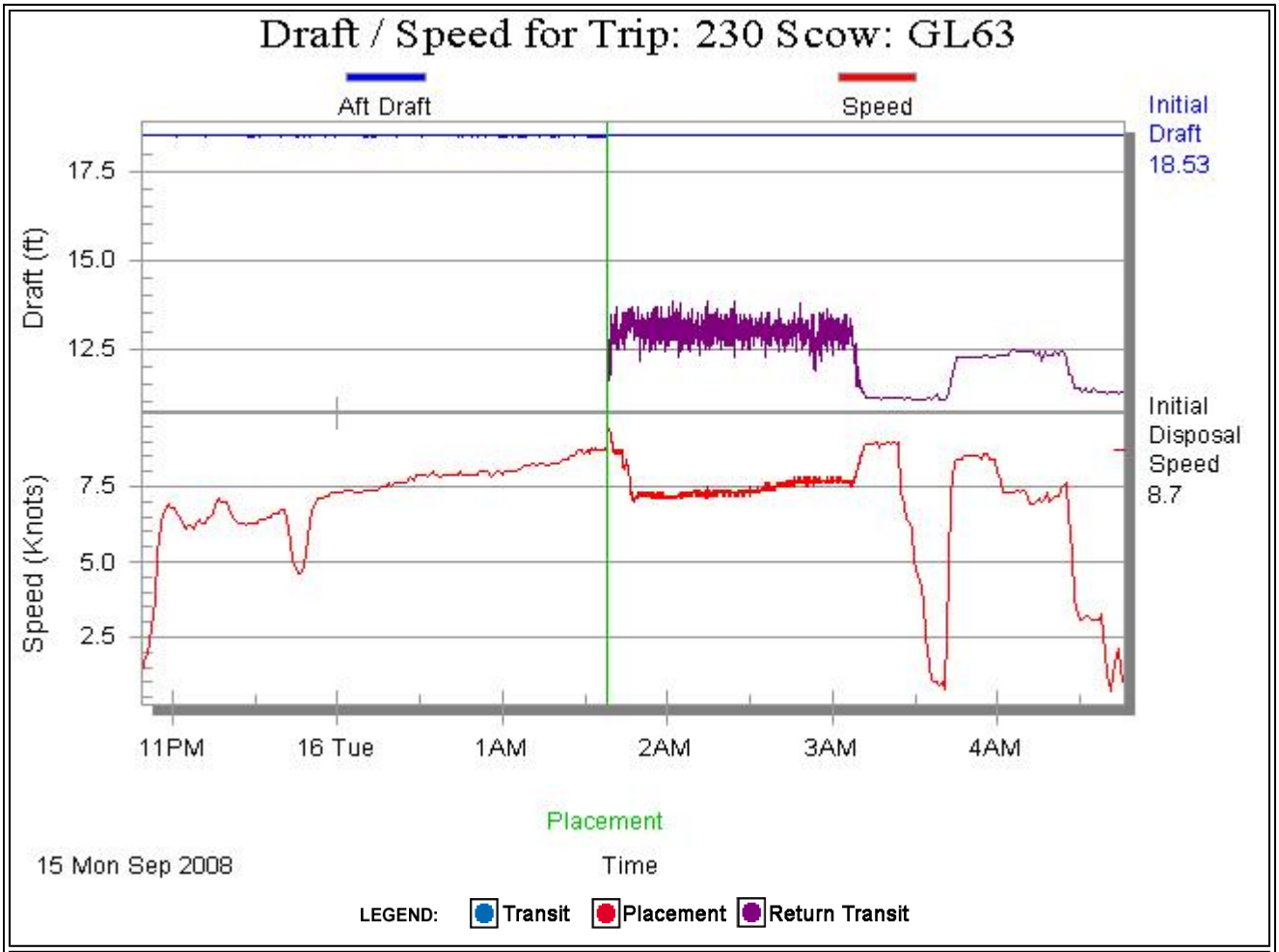


Trip Information

Trip #:	230
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/15/2008 22:48:42
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/16/2008 01:37:40
Latitude:	42.413179
Longitude:	-70.594556
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/16/2008 01:38:19
Latitude:	42.413355
Longitude:	-70.592338
Aft Draft:	11.94 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091608_114226

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

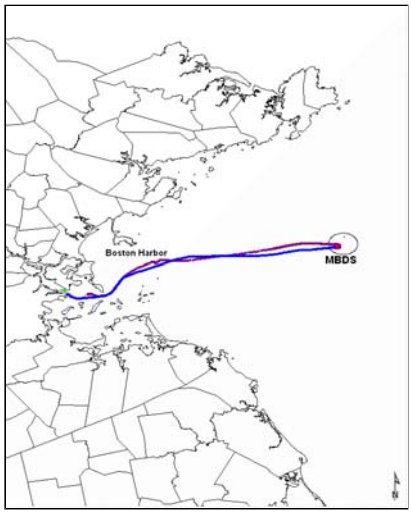
Trip Information:

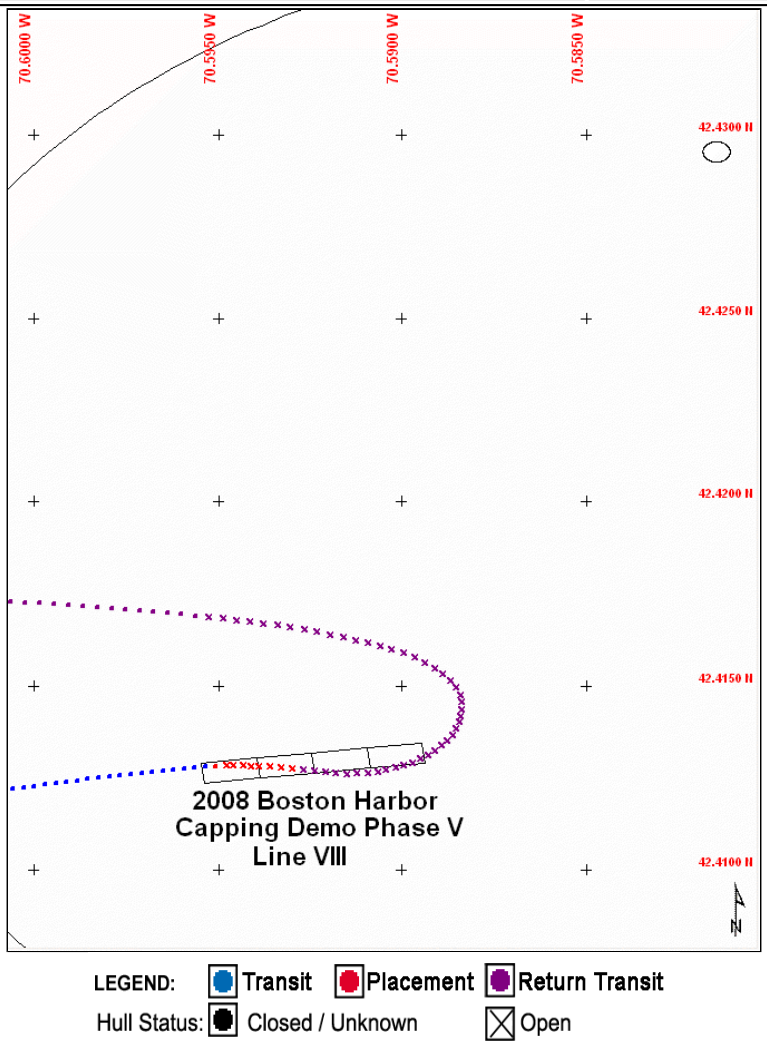
Trip #:	231
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/16/2008 08:07:00
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/16/2008 10:54:57	**Time:**	9/16/2008 10:55:38
Lat:	42.412829	**Lat:**	42.412769
Long:	-70.595069	**Long:**	-70.592996
Aft Draft:	20.32 ft	**Aft Draft:**	8.36 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/16/2008 7:38:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091708_132941

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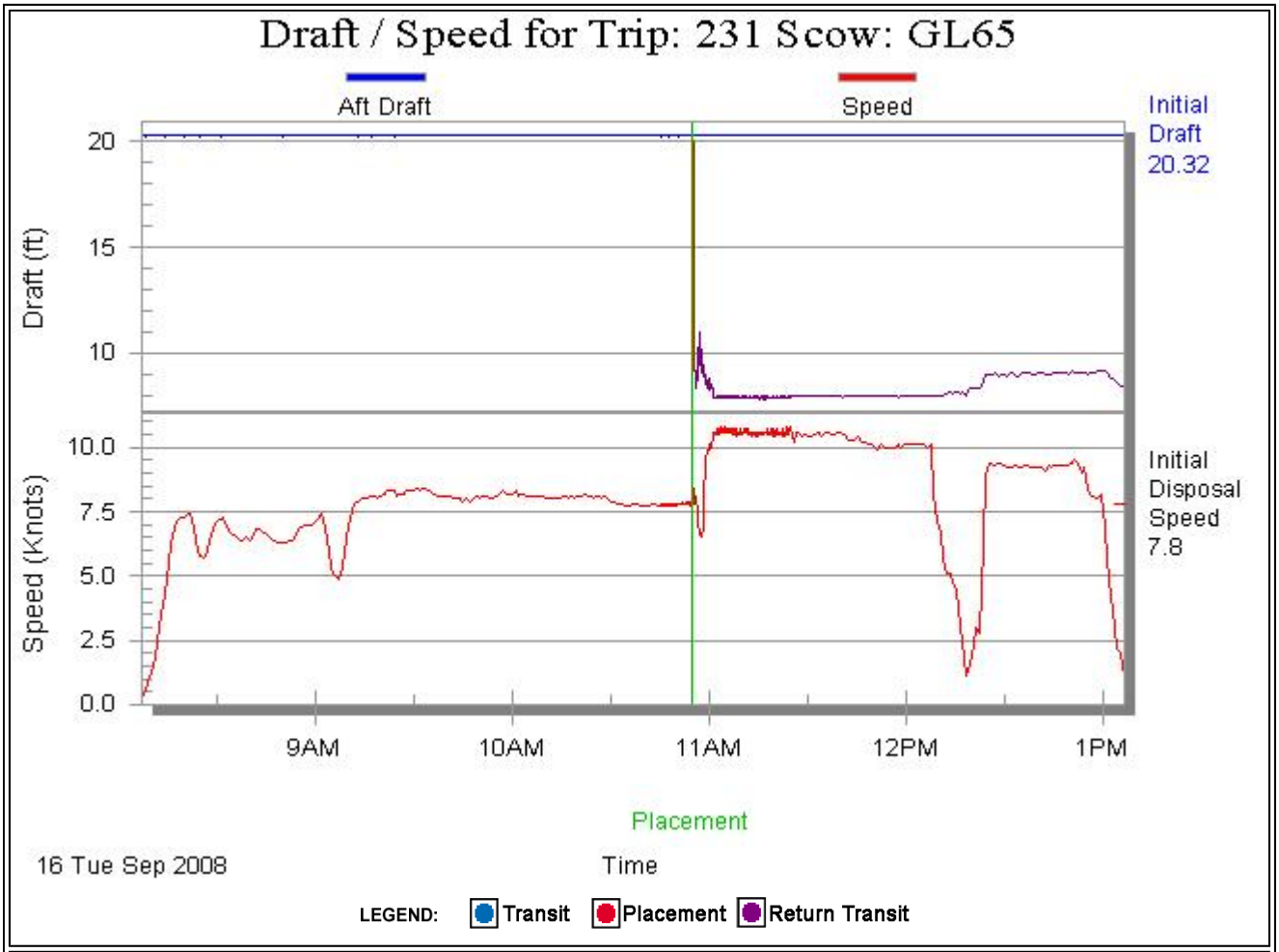


Trip Information

Trip #:	231
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/16/2008 08:07:00
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/16/2008 10:54:57
Latitude:	42.412829
Longitude:	-70.595069
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/16/2008 10:55:38
Latitude:	42.412769
Longitude:	-70.592996
Aft Draft:	8.36 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091708_132941

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

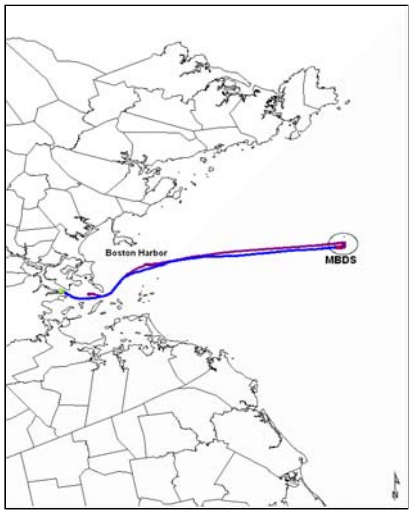
Trip Information:

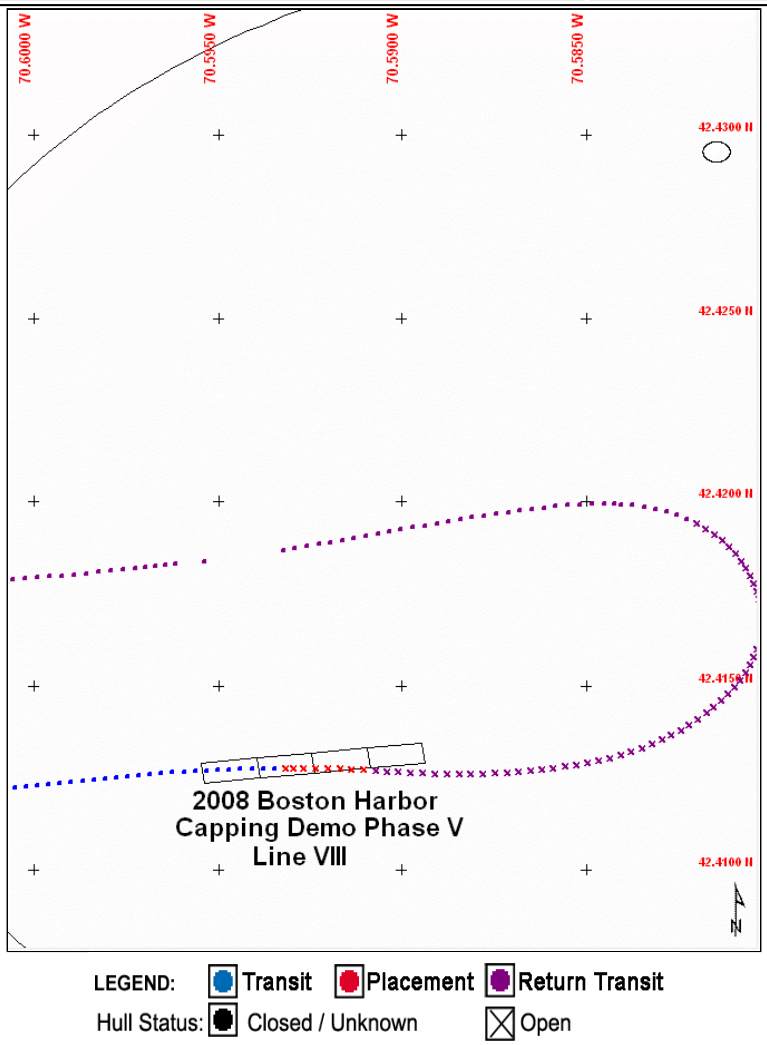
Trip #:	232
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/16/2008 19:35:26
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/16/2008 22:27:52	**Time:**	9/16/2008 22:28:31
Lat:	42.412773	**Lat:**	42.412718
Long:	-70.593169	**Long:**	-70.591062
Aft Draft:	18.45 ft	**Aft Draft:**	12.58 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/16/2008 7:03:00 PM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091708_134021

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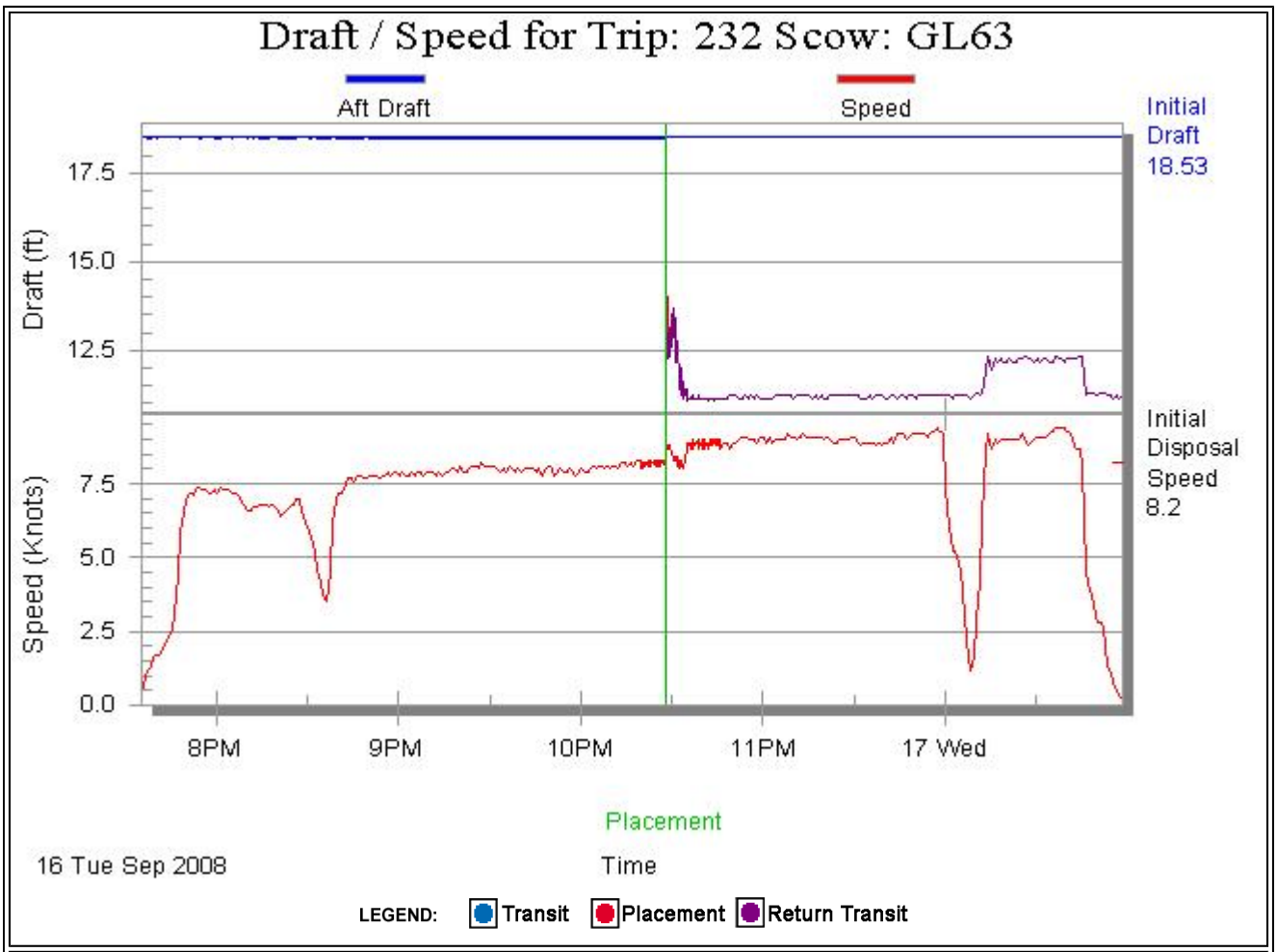


Trip Information

Trip #:	232
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/16/2008 19:35:26
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/16/2008 22:27:52
Latitude:	42.412773
Longitude:	-70.593169
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/16/2008 22:28:31
Latitude:	42.412718
Longitude:	-70.591062
Aft Draft:	12.58 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091708_134021

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

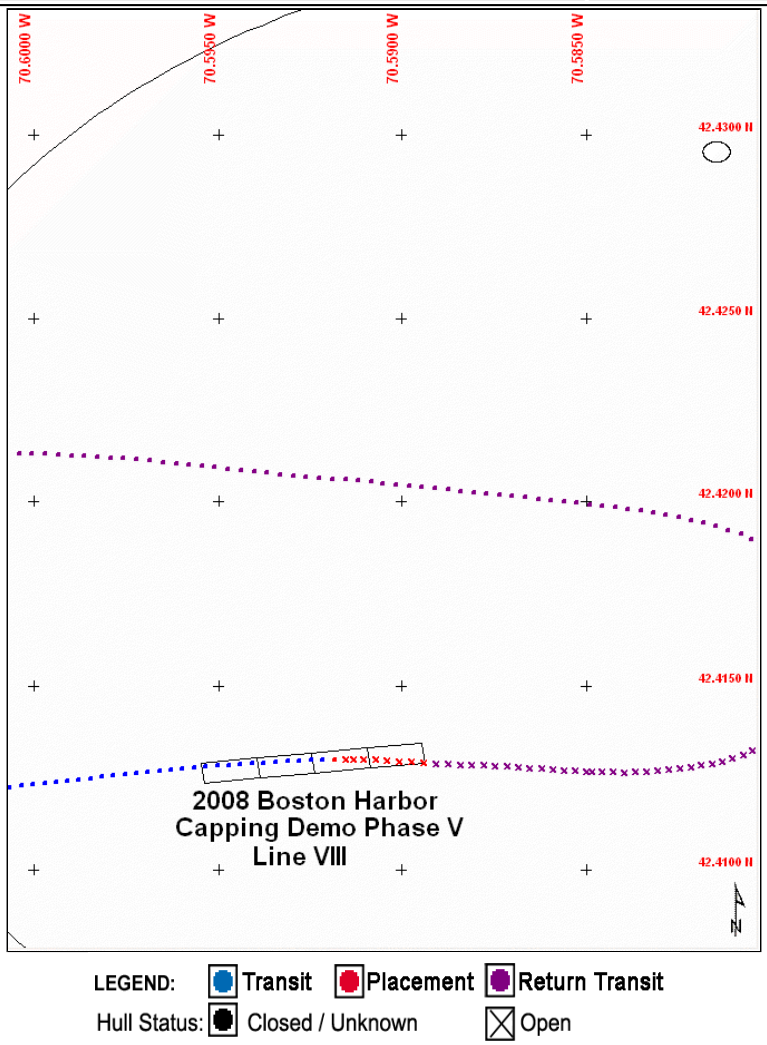
Trip #:	233
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/17/2008 04:21:15
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/17/2008 07:11:39	**Time:**	9/17/2008 07:12:24
Lat:	42.413008	**Lat:**	42.412910
Long:	-70.591866	**Long:**	-70.589408
Aft Draft:	19.88 ft	**Aft Draft:**	8.29 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/17/2008 4:15:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091708_133208

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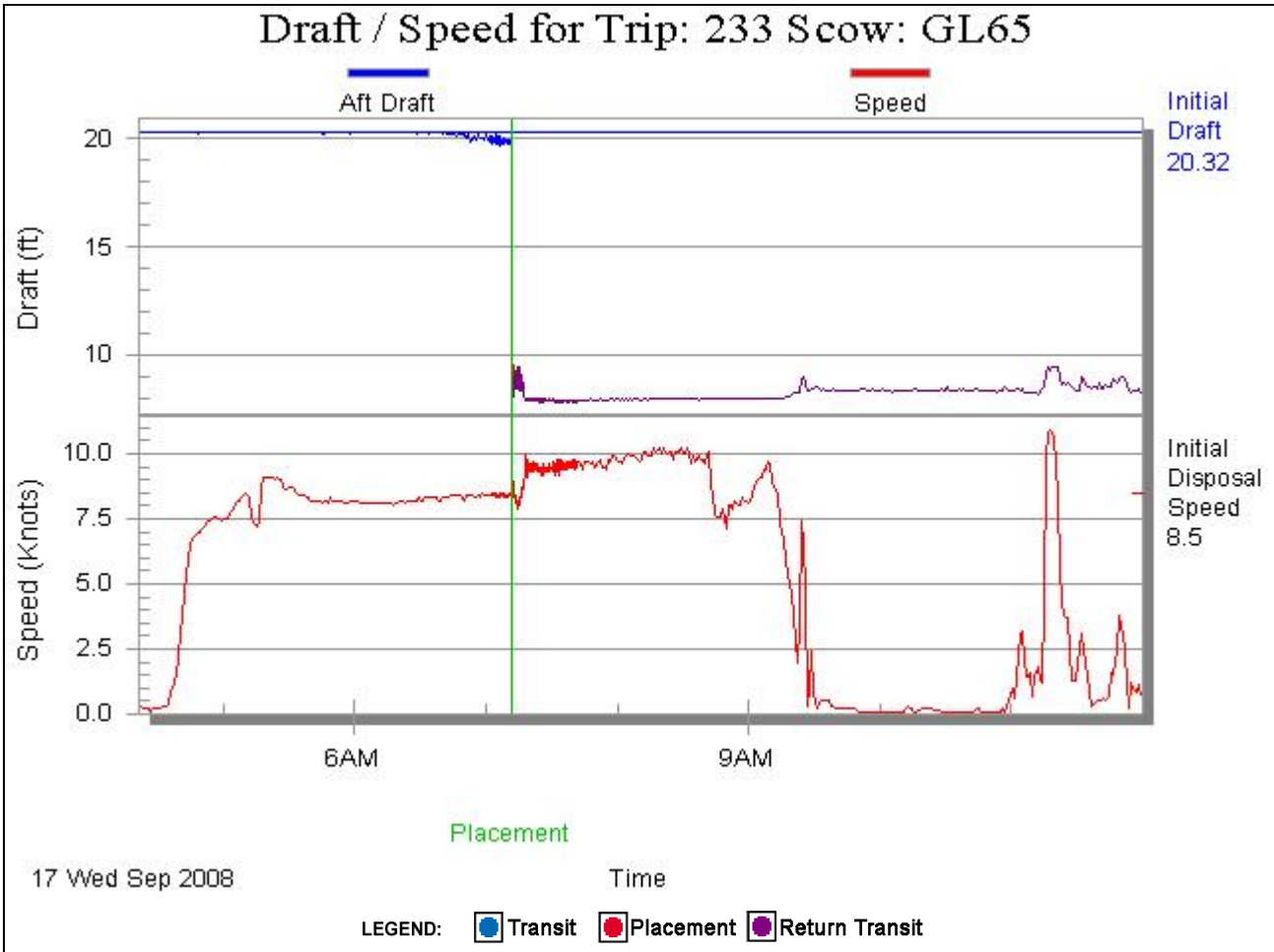


Trip Information

Trip #:	233
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/17/2008 04:21:15
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/17/2008 07:11:39
Latitude:	42.413008
Longitude:	-70.591866
Aft Draft:	19.88 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/17/2008 07:12:24
Latitude:	42.412910
Longitude:	-70.589408
Aft Draft:	8.29 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091708_133208

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

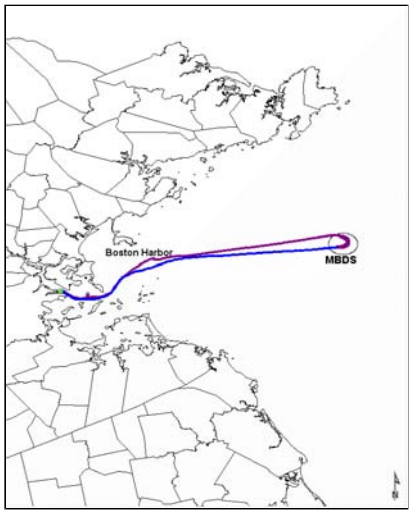
Trip Information:

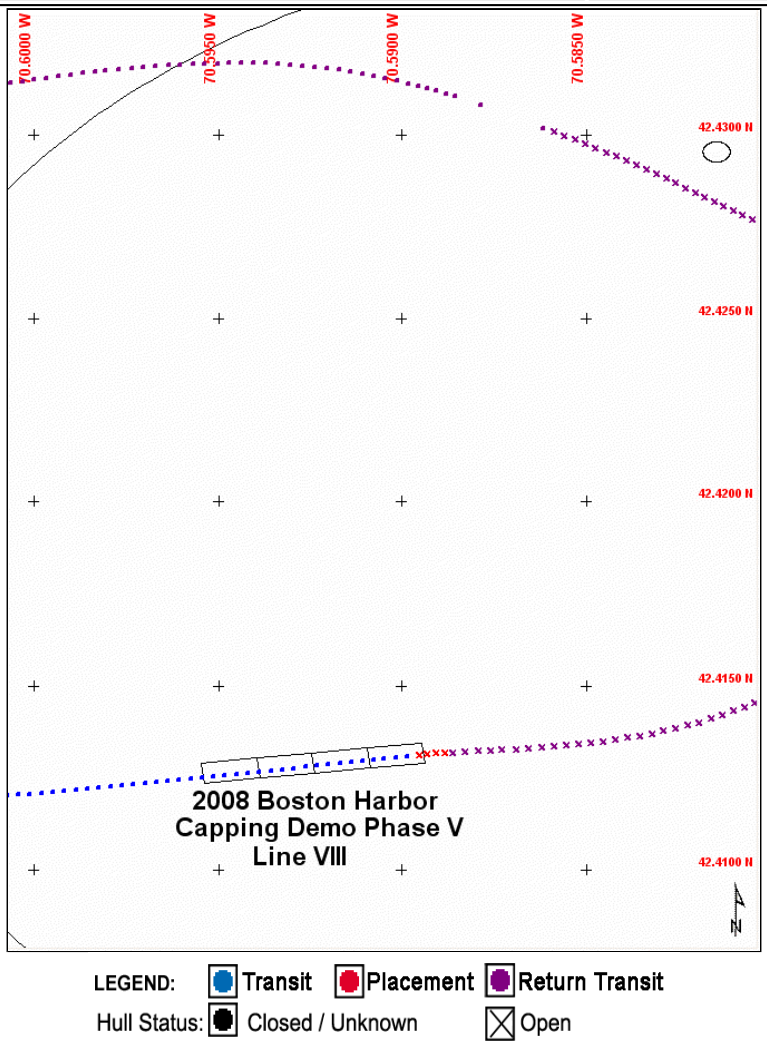
Trip #:	234
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/17/2008 12:23:00
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/17/2008 15:15:51	9/17/2008 15:16:04
Lat:	42.413124	42.413179
Long:	-70.589537	-70.588829
Aft Draft:	18.53 ft	12.42 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/17/2008 12:20:00 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091808_124404

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W912WJ-07-C-0023

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Trip Information

Trip #:	234
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/17/2008 12:23:00
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/17/2008 15:15:51
Latitude:	42.413124
Longitude:	-70.589537
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/17/2008 15:16:04
Latitude:	42.413179
Longitude:	-70.588829
Aft Draft:	12.42 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091808_124404

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

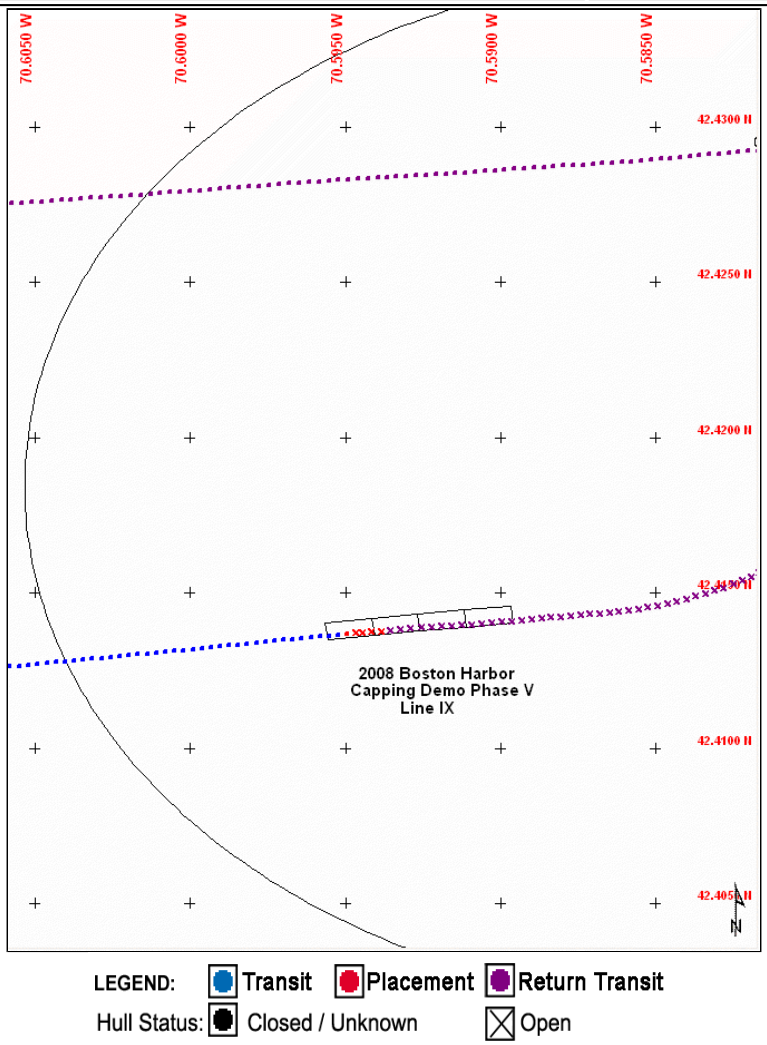
Trip #:	235
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/17/2008 21:52:53
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/18/2008 01:01:15	**Time:**	9/18/2008 01:01:36
Lat:	42.413667	**Lat:**	42.413757
Long:	-70.594952	**Long:**	-70.593857
Aft Draft:	20.32 ft	**Aft Draft:**	9.40 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/17/2008 9:16:00 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091908_123417

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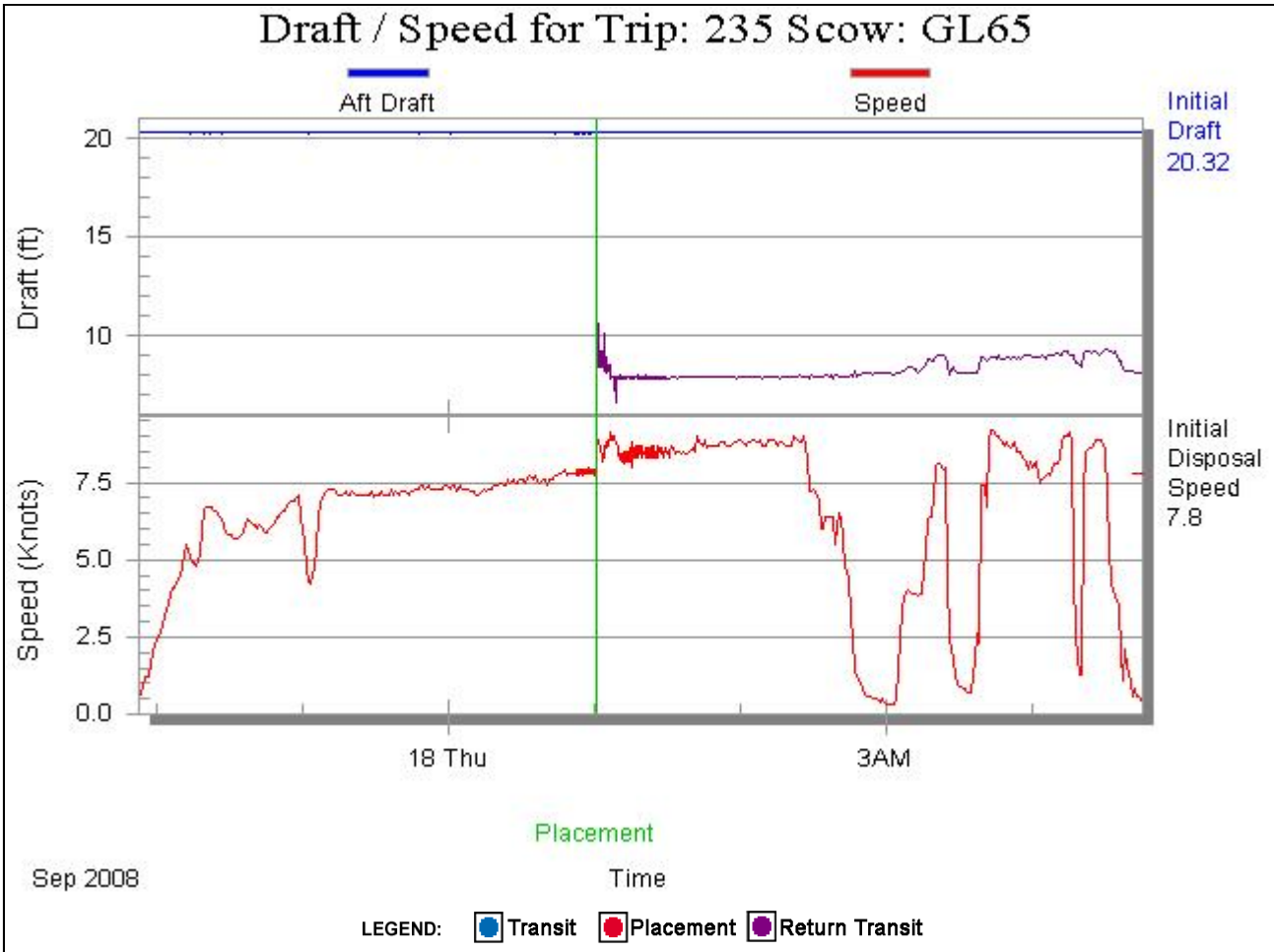


Trip Information

Trip #:	235
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/17/2008 21:52:53
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/18/2008 01:01:15	**Time:**	9/18/2008 01:01:36
Latitude:	42.413667	**Latitude:**	42.413757
Longitude:	-70.594952	**Longitude:**	-70.593857
Aft Draft:	20.32 ft	**Aft Draft:**	9.40 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091908_123417

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

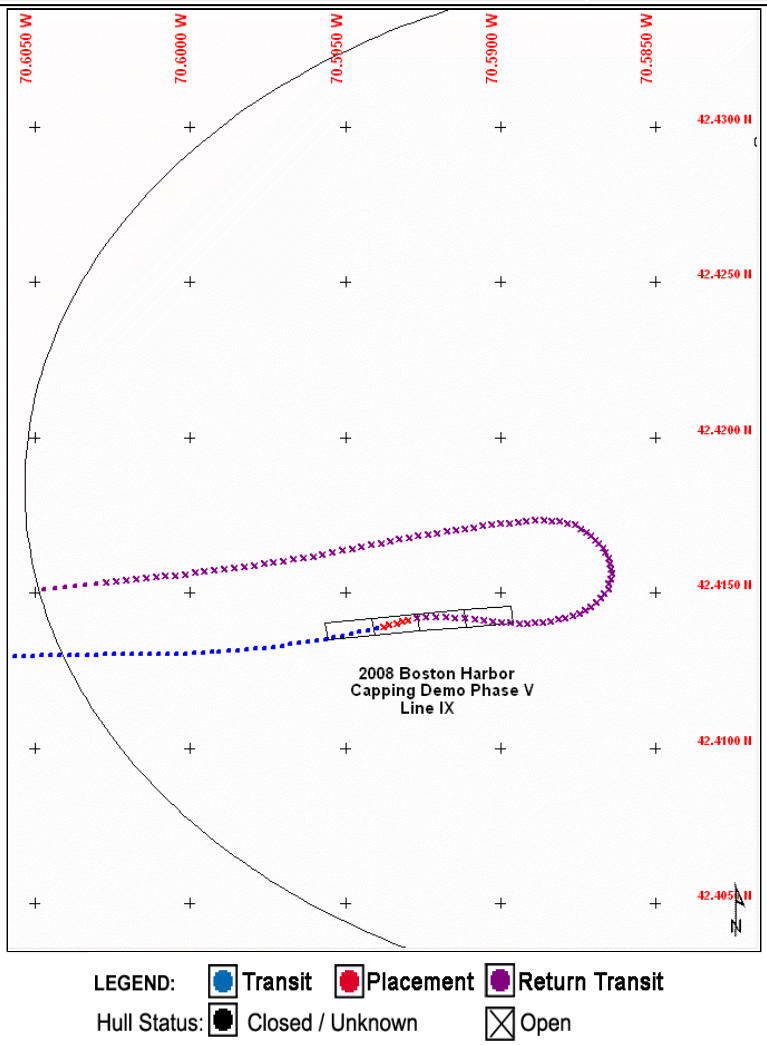
Trip #:	236
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/18/2008 05:13:03
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/18/2008 08:09:03	**Time:**	9/18/2008 08:09:20
Lat:	42.413899	**Lat:**	42.414109
Long:	-70.593734	**Long:**	-70.592958
Aft Draft:	18.45 ft	**Aft Draft:**	11.86 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/18/2008 4:46:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 091908_123713

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2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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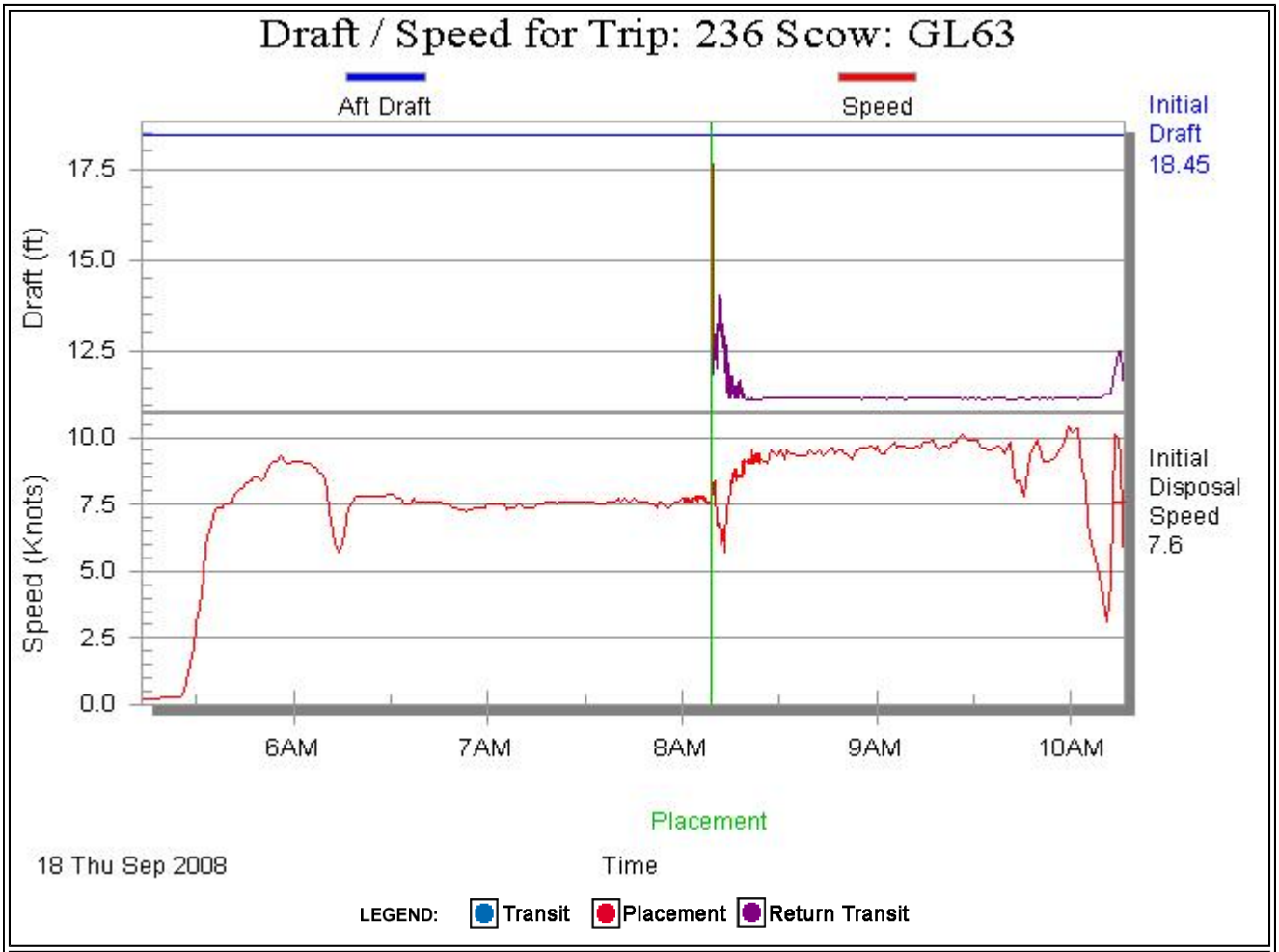


Trip Information

Trip #:	236
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/18/2008 05:13:03
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/18/2008 08:09:03
Latitude:	42.413899
Longitude:	-70.593734
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/18/2008 08:09:20
Latitude:	42.414109
Longitude:	-70.592958
Aft Draft:	11.86 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 091908_123713

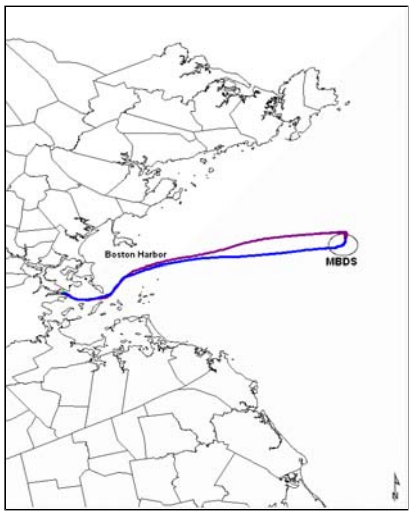
2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

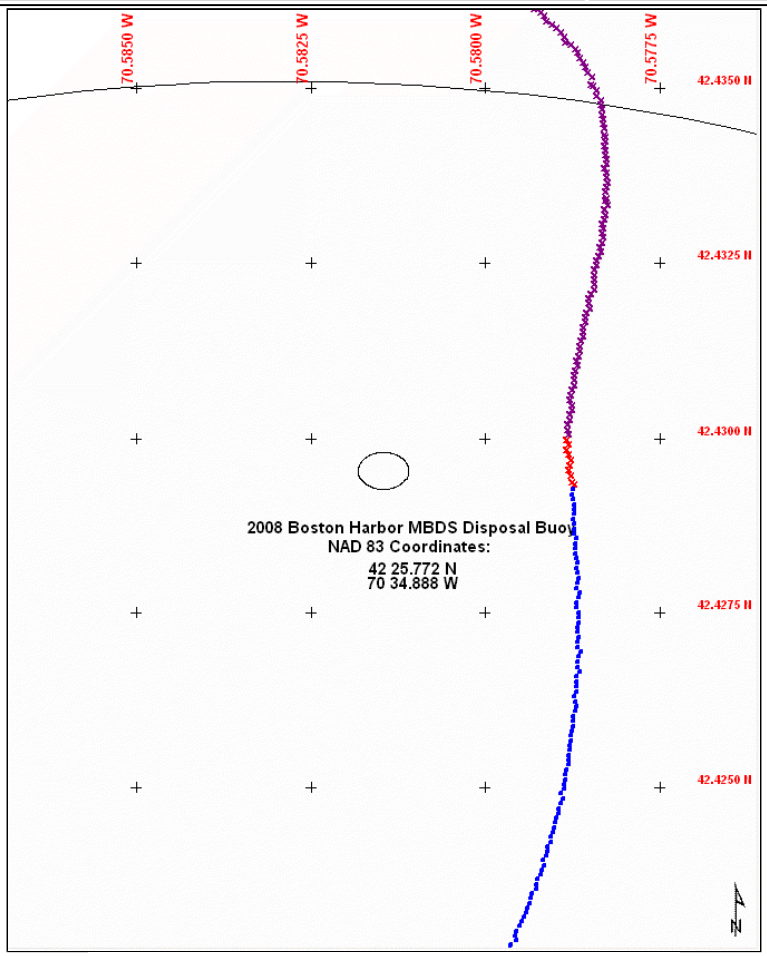
Trip #:	237
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/19/2008 20:24:52
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/19/2008 23:41:58	**Time:**	9/19/2008 23:42:16
Lat:	42.429329	**Lat:**	42.429982
Long:	-70.578739	**Long:**	-70.578842
Aft Draft:	18.45 ft	**Aft Draft:**	12.26 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/19/2008 8:07:00 PM (Local)
Wave Height: 4.3 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_153737

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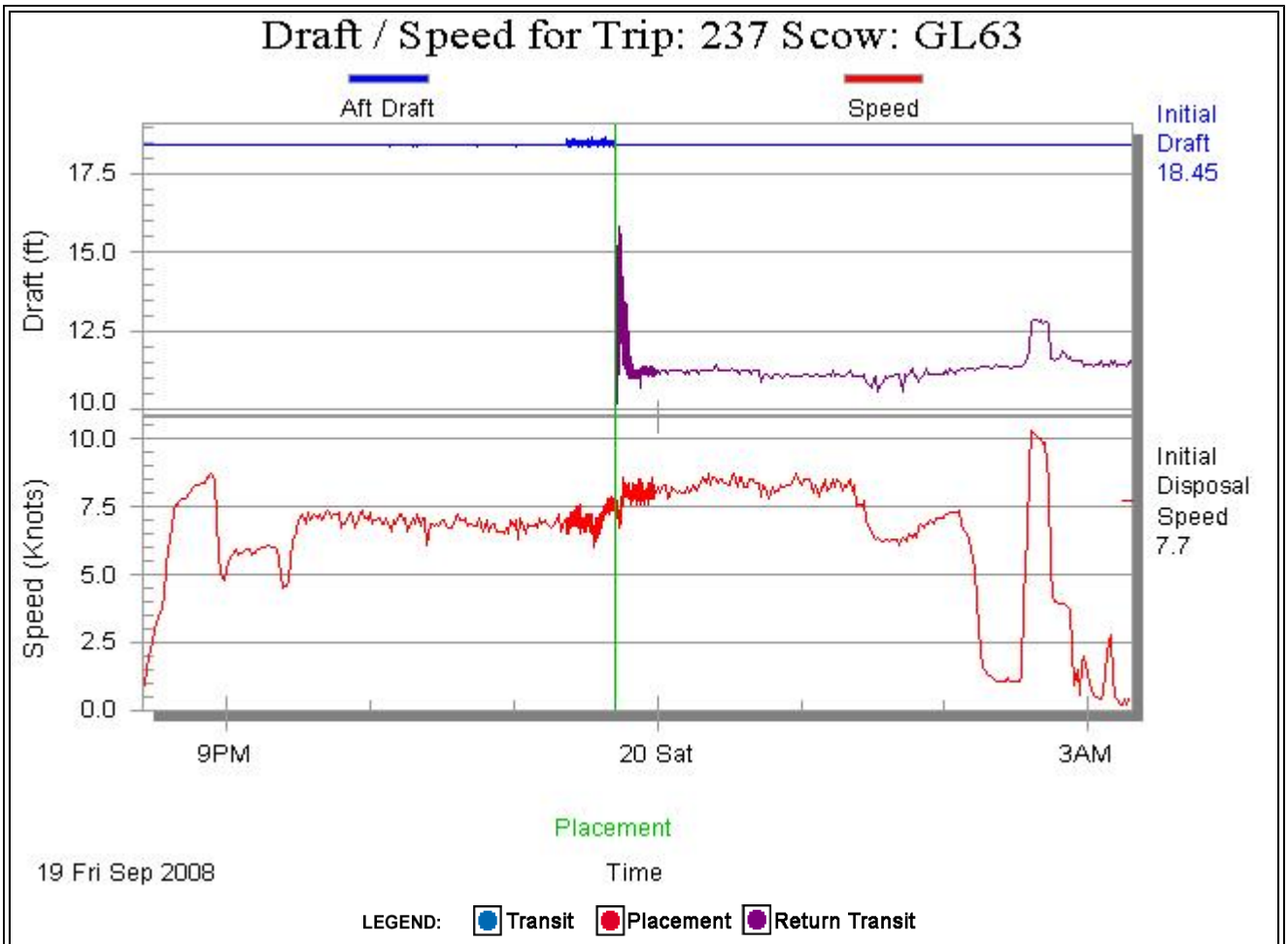

Trip Information

Trip #:	237
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/19/2008 20:24:52
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/19/2008 23:41:58
Latitude:	42.429329
Longitude:	-70.578739
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/19/2008 23:42:16
Latitude:	42.429982
Longitude:	-70.578842
Aft Draft:	12.26 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_153737

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Trip Information:

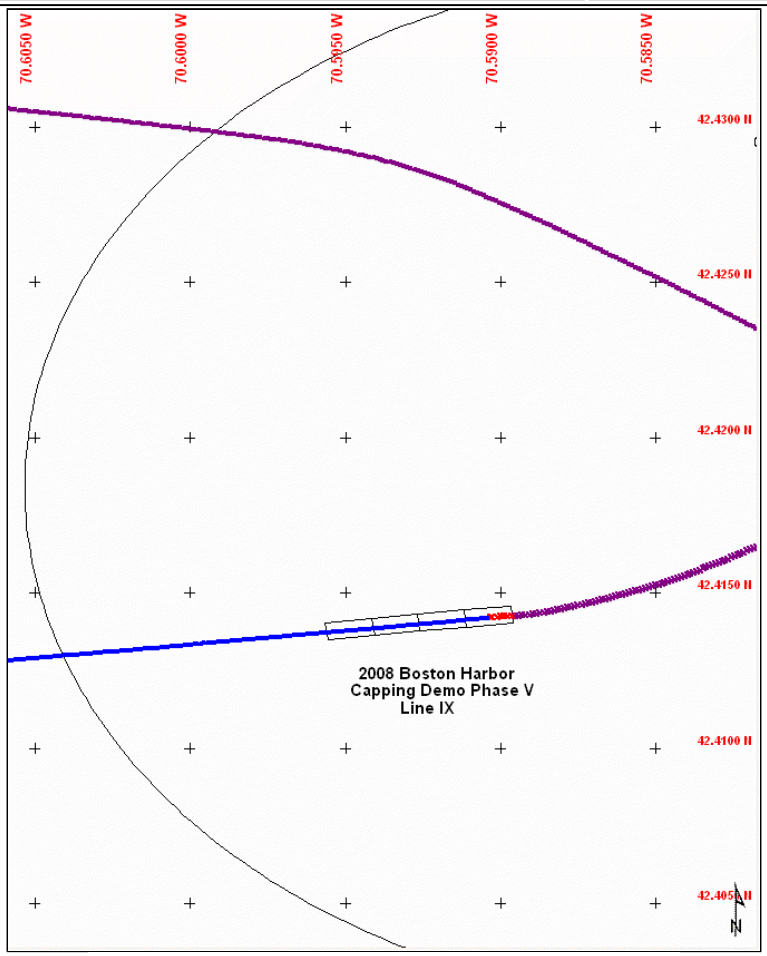
Trip #:	238
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/20/2008 04:02:01
Init Aft Draft:	20.17 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/20/2008 06:41:07	**Time:**	9/20/2008 06:41:19
Lat:	42.414195	**Lat:**	42.414243
Long:	-70.590327	**Long:**	-70.589647
Aft Draft:	20.32 ft	**Aft Draft:**	9.25 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/20/2008 3:23:00 AM (Local)
Wave Height: 4.3 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_154039

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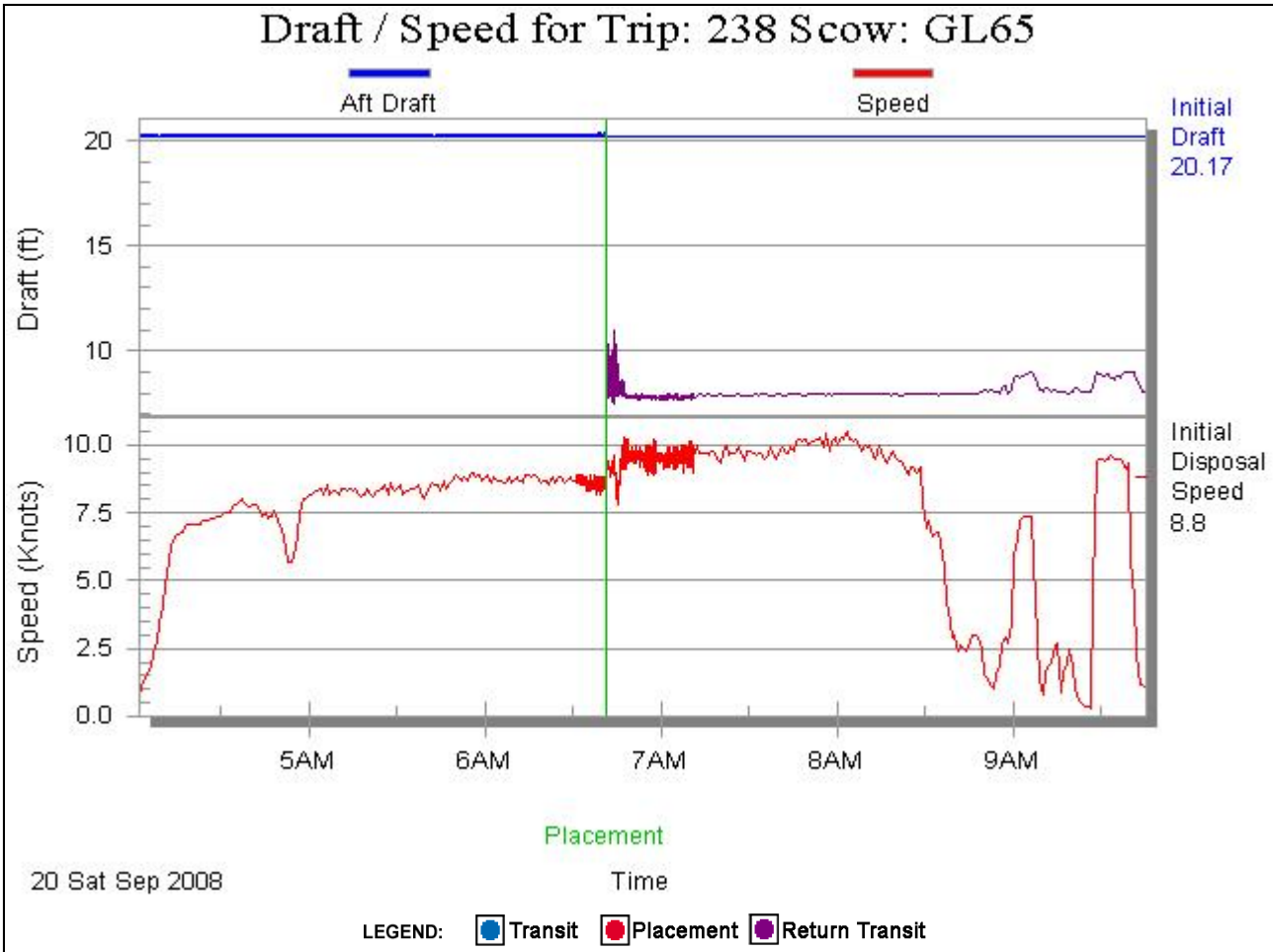

Trip Information

Trip #:	238
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/20/2008 04:02:01
Init Aft Draft:	20.17 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/20/2008 06:41:07	**Time:**	9/20/2008 06:41:19
Latitude:	42.414195	**Latitude:**	42.414243
Longitude:	-70.590327	**Longitude:**	-70.589647
Aft Draft:	20.32 ft	**Aft Draft:**	9.25 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_154039

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Trip Information:

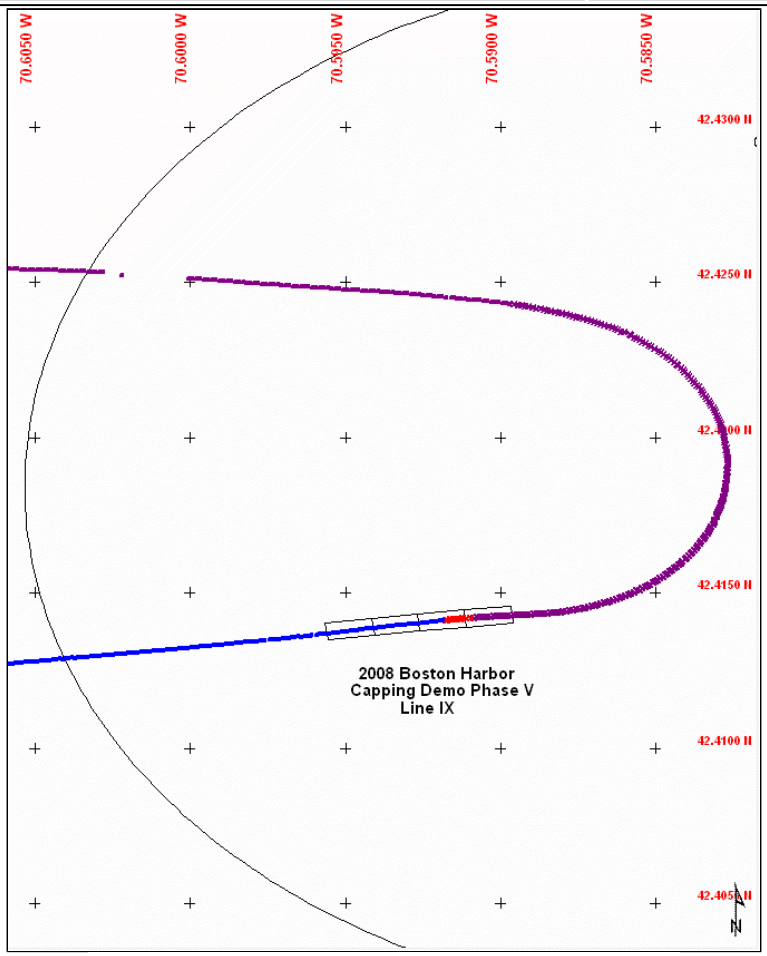
Trip #:	239
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/20/2008 10:19:16
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/20/2008 13:05:52	**Time:**	9/20/2008 13:06:07
Lat:	42.414109	**Lat:**	42.414173
Long:	-70.591751	**Long:**	-70.590969
Aft Draft:	18.53 ft	**Aft Draft:**	12.02 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/20/2008 9:57:00 AM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_154057

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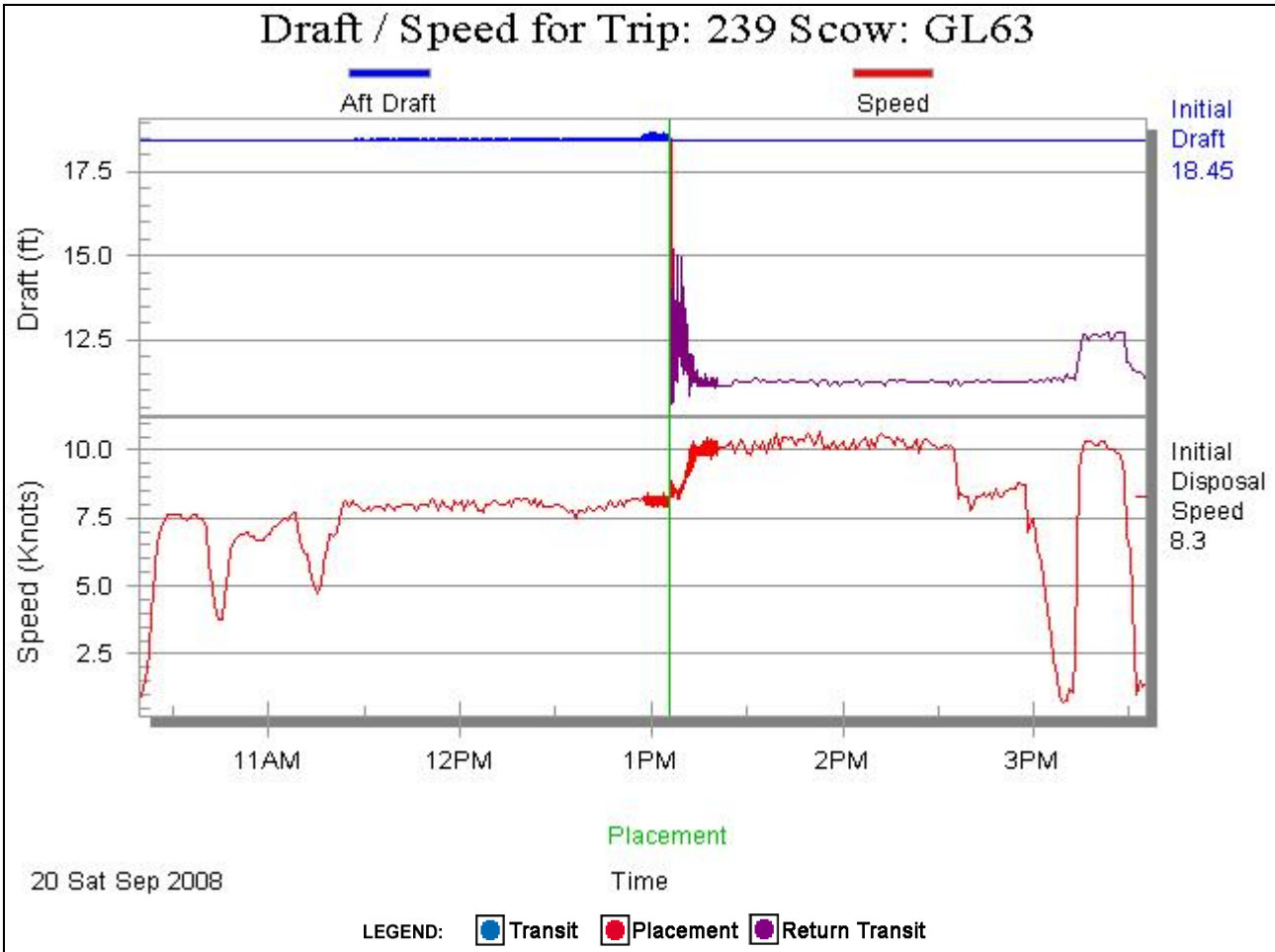

Trip Information

Trip #:	239
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/20/2008 10:19:16
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/20/2008 13:05:52
Latitude:	42.414109
Longitude:	-70.591751
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/20/2008 13:06:07
Latitude:	42.414173
Longitude:	-70.590969
Aft Draft:	12.02 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_154057

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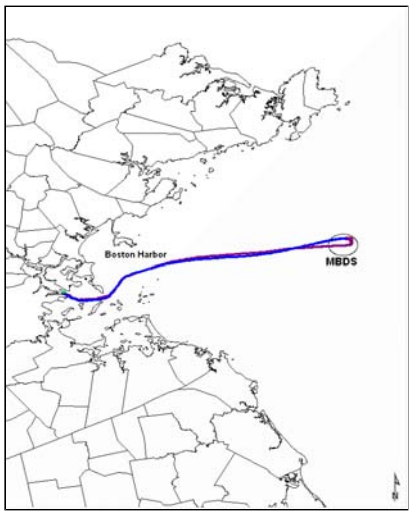
Trip Information:

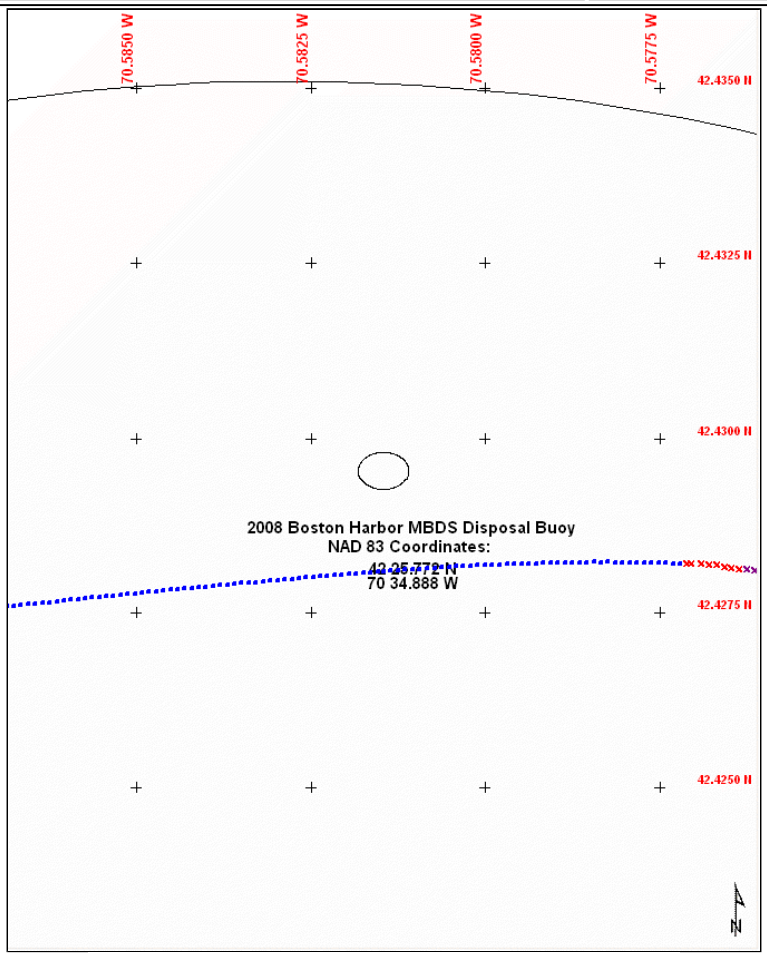
Trip #:	240
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/20/2008 15:59:21
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/20/2008 18:52:57	9/20/2008 18:53:11
Lat:	42.428198	42.428122
Long:	-70.577117	-70.576375
Aft Draft:	20.32 ft	8.95 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/20/2008 3:39:00 PM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_153718

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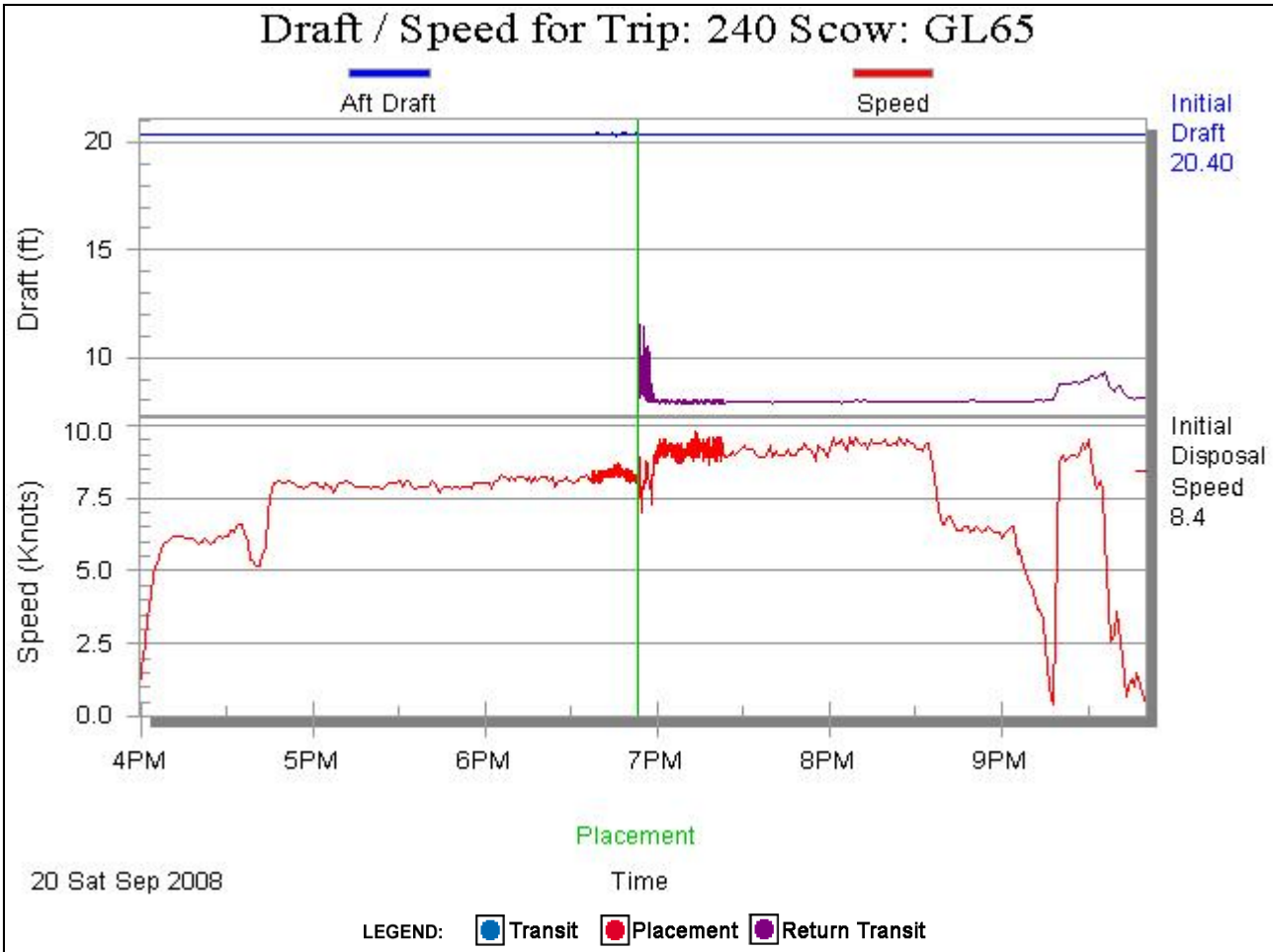

Trip Information

Trip #:	240
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/20/2008 15:59:21
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/20/2008 18:52:57	**Time:**	9/20/2008 18:53:11
Latitude:	42.428198	**Latitude:**	42.428122
Longitude:	-70.577117	**Longitude:**	-70.576375
Aft Draft:	20.32 ft	**Aft Draft:**	8.95 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_153718

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Trip Information:

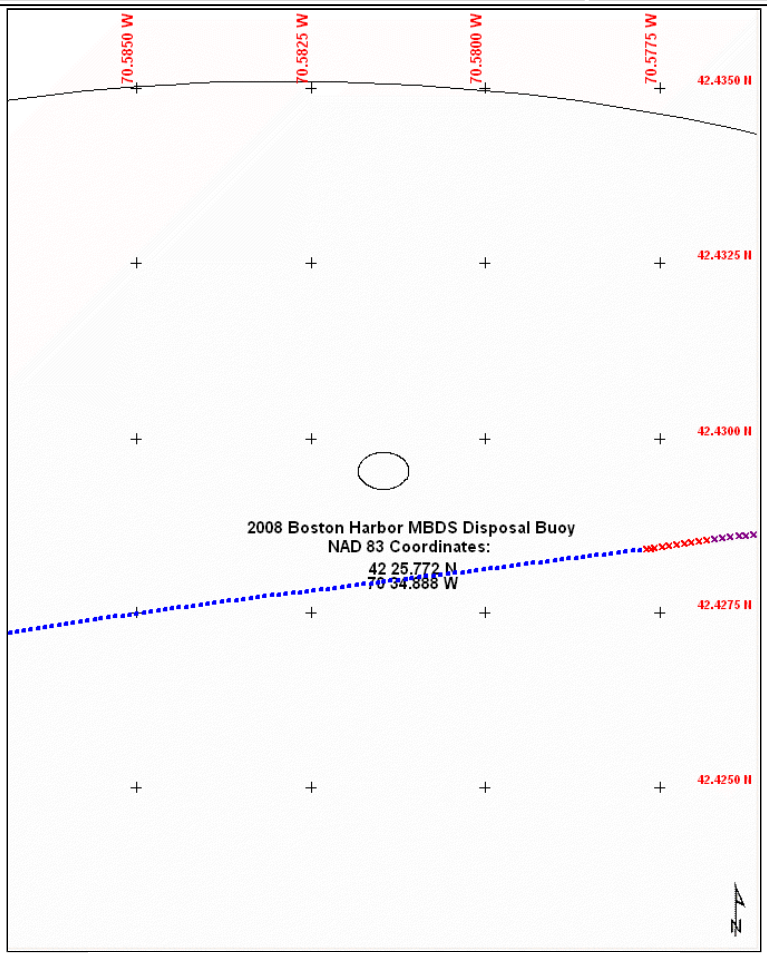
Trip #:	241
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/20/2008 22:23:09
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/21/2008 01:23:25	**Time:**	9/21/2008 01:23:41
Lat:	42.428410	**Lat:**	42.428534
Long:	-70.577687	**Long:**	-70.576837
Aft Draft:	18.45 ft	**Aft Draft:**	12.58 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/20/2008 9:53:00 PM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_153653

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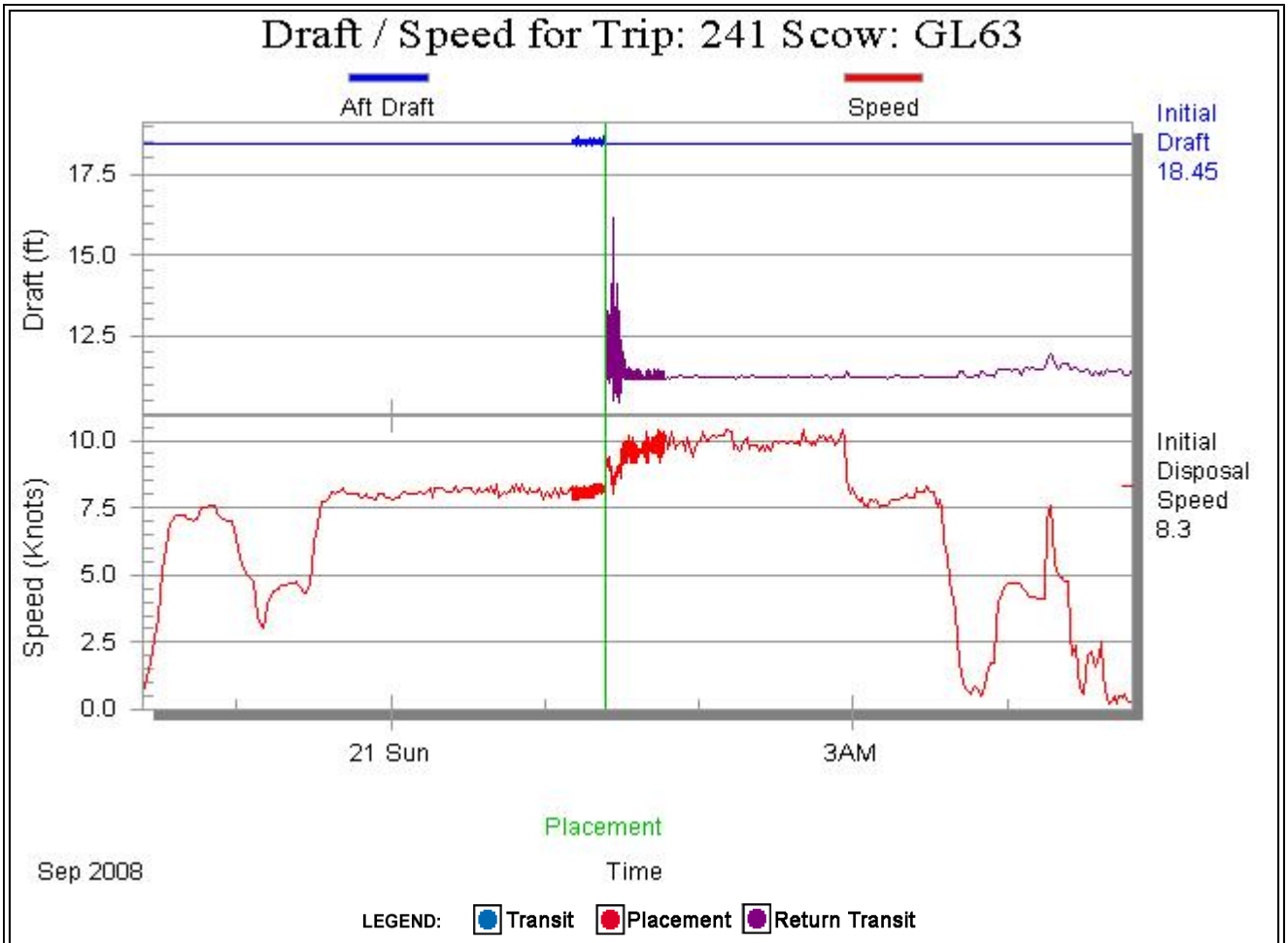

Trip Information

Trip #:	241
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/20/2008 22:23:09
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/21/2008 01:23:25
Latitude:	42.428410
Longitude:	-70.577687
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/21/2008 01:23:41
Latitude:	42.428534
Longitude:	-70.576837
Aft Draft:	12.58 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_153653

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Trip Information:

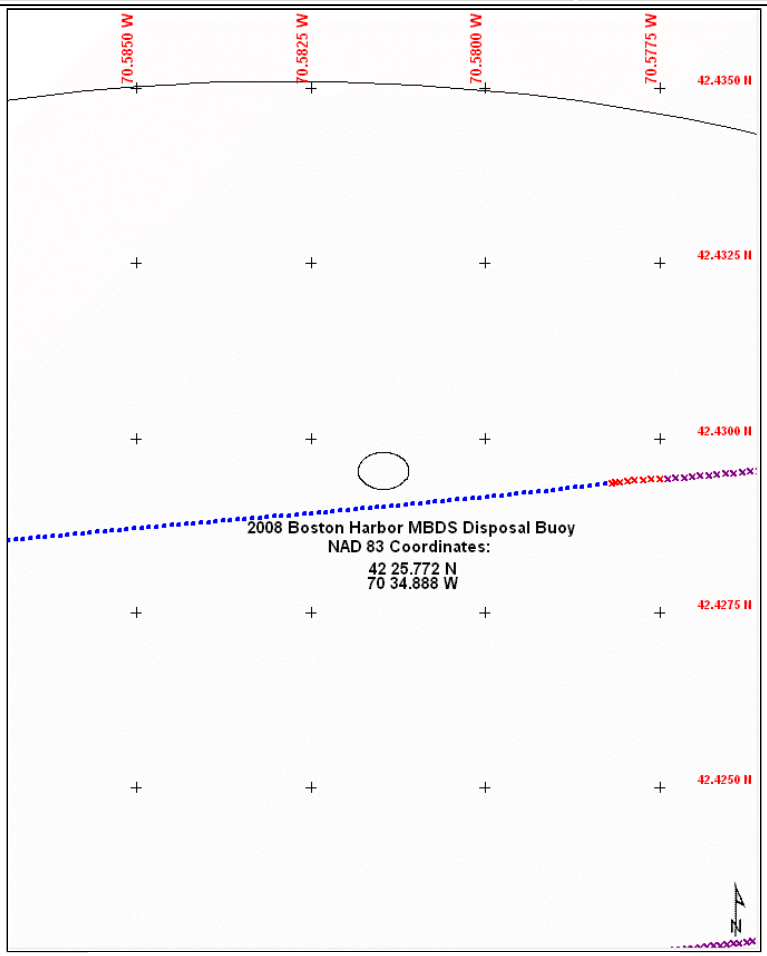
Trip #:	242
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/21/2008 04:44:14
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/21/2008 07:55:28	**Time:**	9/21/2008 07:55:40
Lat:	42.429348	**Lat:**	42.429409
Long:	-70.578189	**Long:**	-70.577516
Aft Draft:	20.32 ft	**Aft Draft:**	8.81 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/21/2008 4:46:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #242. SAIC contacted Tug Inspector Frank Alboth aboard the Tug Lemmerhirt who informed SAIC that the GL65 was giving off a "Hydrolic Alarm" The GL65 was manually closed upon return to the Dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_153608

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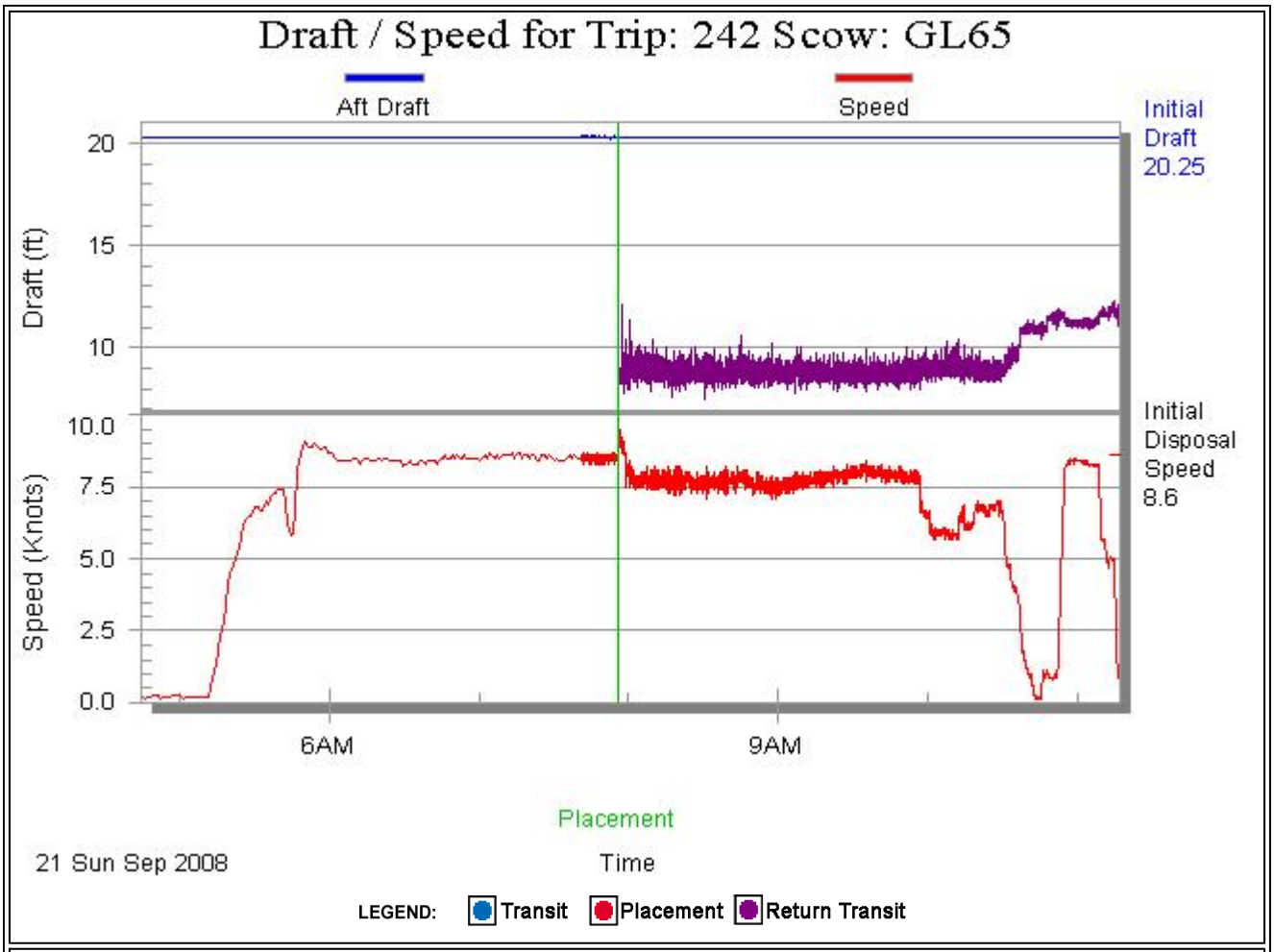

Trip Information

Trip #:	242
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/21/2008 04:44:14
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/21/2008 07:55:28	**Time:**	9/21/2008 07:55:40
Latitude:	42.429348	**Latitude:**	42.429409
Longitude:	-70.578189	**Longitude:**	-70.577516
Aft Draft:	20.32 ft	**Aft Draft:**	8.81 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #242. SAIC contacted Tug Inspector Frank Alboth aboard the Tug Lemmerhirt who informed SAIC that the GL65 was giving off a "Hydrolic Alarm" The GL65 was manually closed upon return to the Dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_153608

2008 Boston Harbor Maintenance Dredging
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Trip Information:

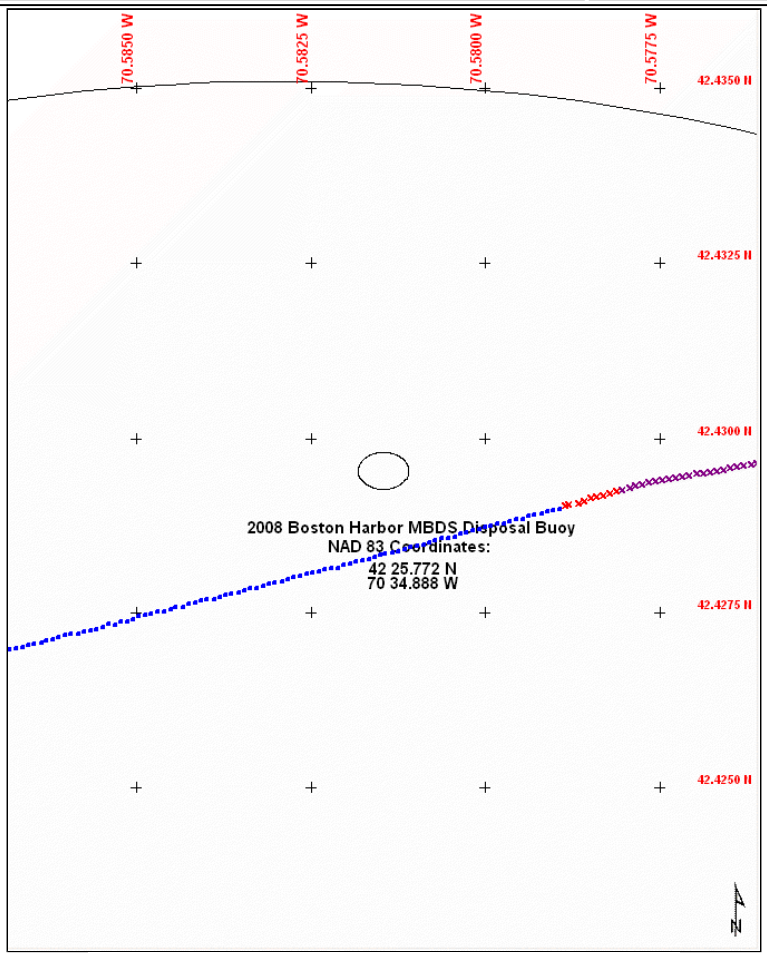
Trip #:	243
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/21/2008 11:50:43
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/21/2008 14:57:33	**Time:**	9/21/2008 14:57:49
Lat:	42.429017	**Lat:**	42.429226
Long:	-70.578854	**Long:**	-70.578130
Aft Draft:	18.61 ft	**Aft Draft:**	11.55 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/21/2008 11:19:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_153530

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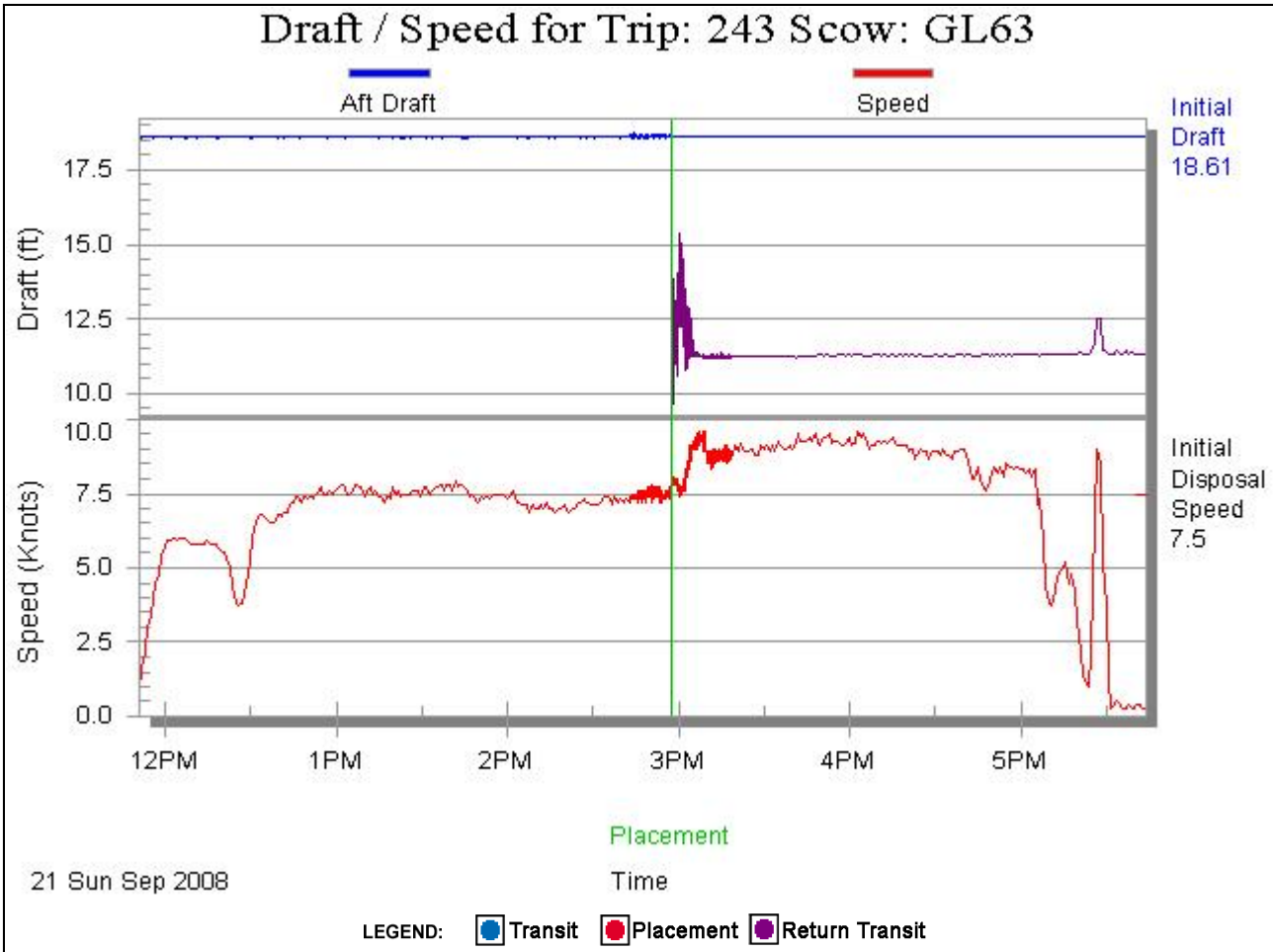

Trip Information

Trip #:	243
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/21/2008 11:50:43
Init Aft Draft:	18.61 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/21/2008 14:57:33
Latitude:	42.429017
Longitude:	-70.578854
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/21/2008 14:57:49
Latitude:	42.429226
Longitude:	-70.578130
Aft Draft:	11.55 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_153530

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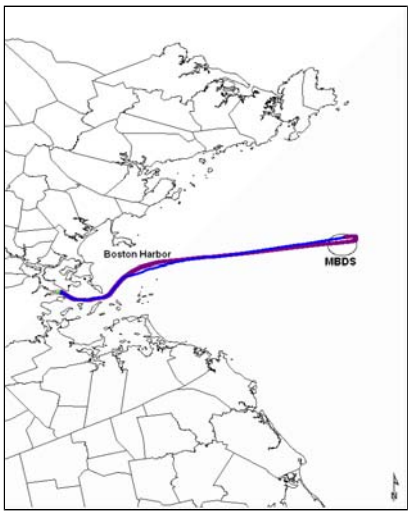
Trip Information:

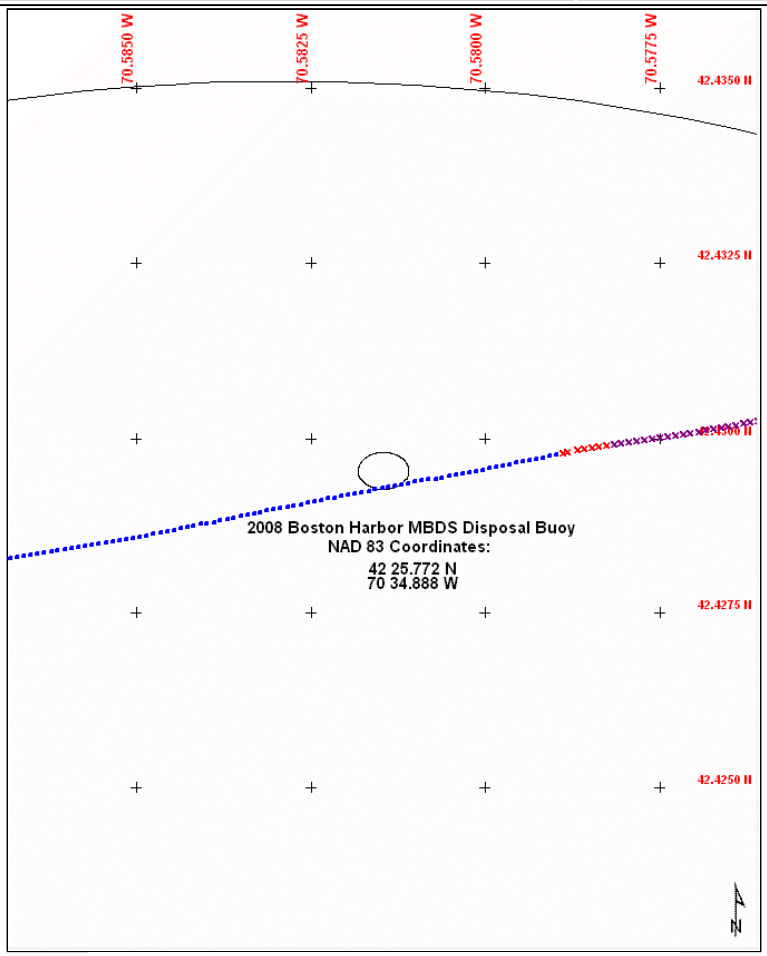
Trip #:	244
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/21/2008 19:54:40
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/21/2008 22:43:32	**Time:**	9/21/2008 22:43:44
Lat:	42.429785	**Lat:**	42.429895
Long:	-70.578885	**Long:**	-70.578270
Aft Draft:	20.32 ft	**Aft Draft:**	9.10 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/21/2008 7:31:00 PM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #244. SAIC contacted Tug Inspector Frank Alboth aboard the Tug Lemmerhirt who informed SAIC that the GL65 was giving off a "Hydrolic Alarm" The GL65 was manually closed upon return to the Dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_153359

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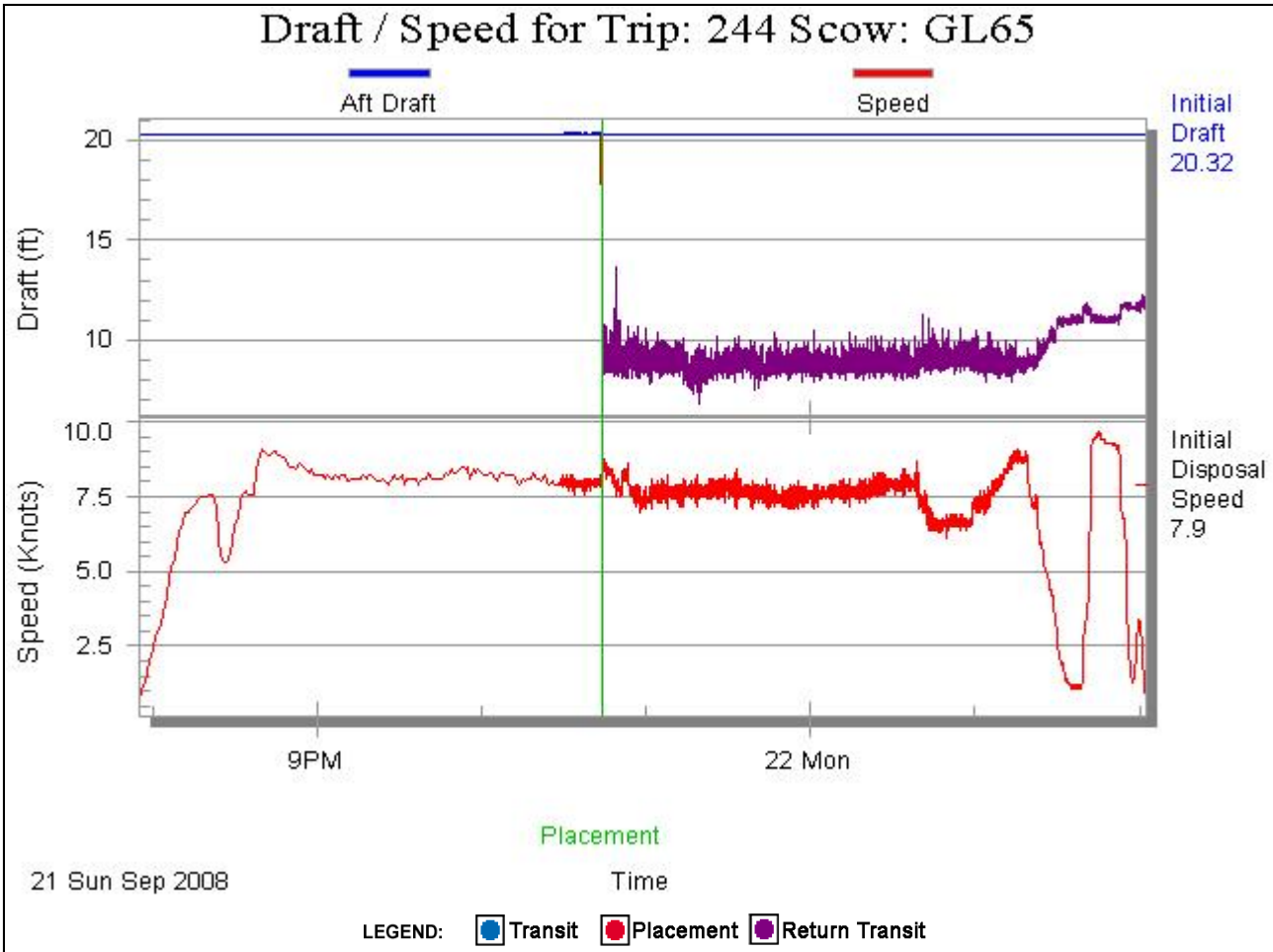


Trip Information

Trip #:	244
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/21/2008 19:54:40
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/21/2008 22:43:32	**Time:**	9/21/2008 22:43:44
Latitude:	42.429785	**Latitude:**	42.429895
Longitude:	-70.578885	**Longitude:**	-70.578270
Aft Draft:	20.32 ft	**Aft Draft:**	9.10 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #244. SAIC contacted Tug Inspector Frank Alboth aboard the Tug Lemmerhirt who informed SAIC that the GL65 was giving off a "Hydrolic Alarm" The GL65 was manually closed upon return to the Dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_153359

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

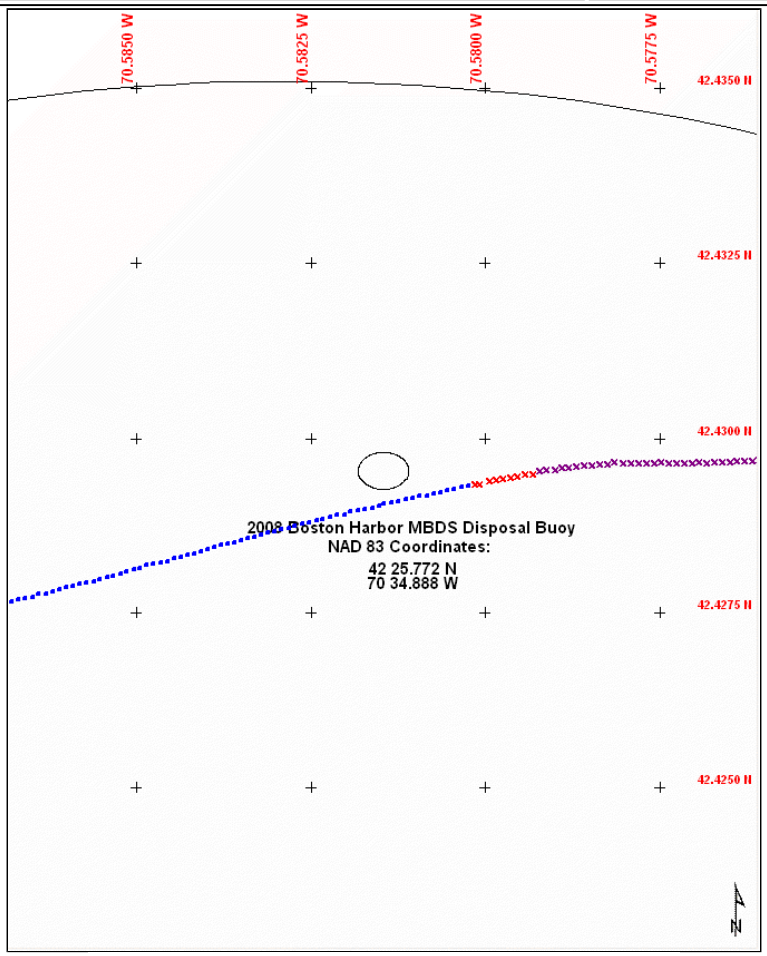
Trip #:	245
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/22/2008 02:46:51
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/22/2008 05:40:35	**Time:**	9/22/2008 05:40:51
Lat:	42.429327	**Lat:**	42.429488
Long:	-70.580149	**Long:**	-70.579326
Aft Draft:	18.45 ft	**Aft Draft:**	11.86 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/22/2008 2:35:00 AM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092208_153440

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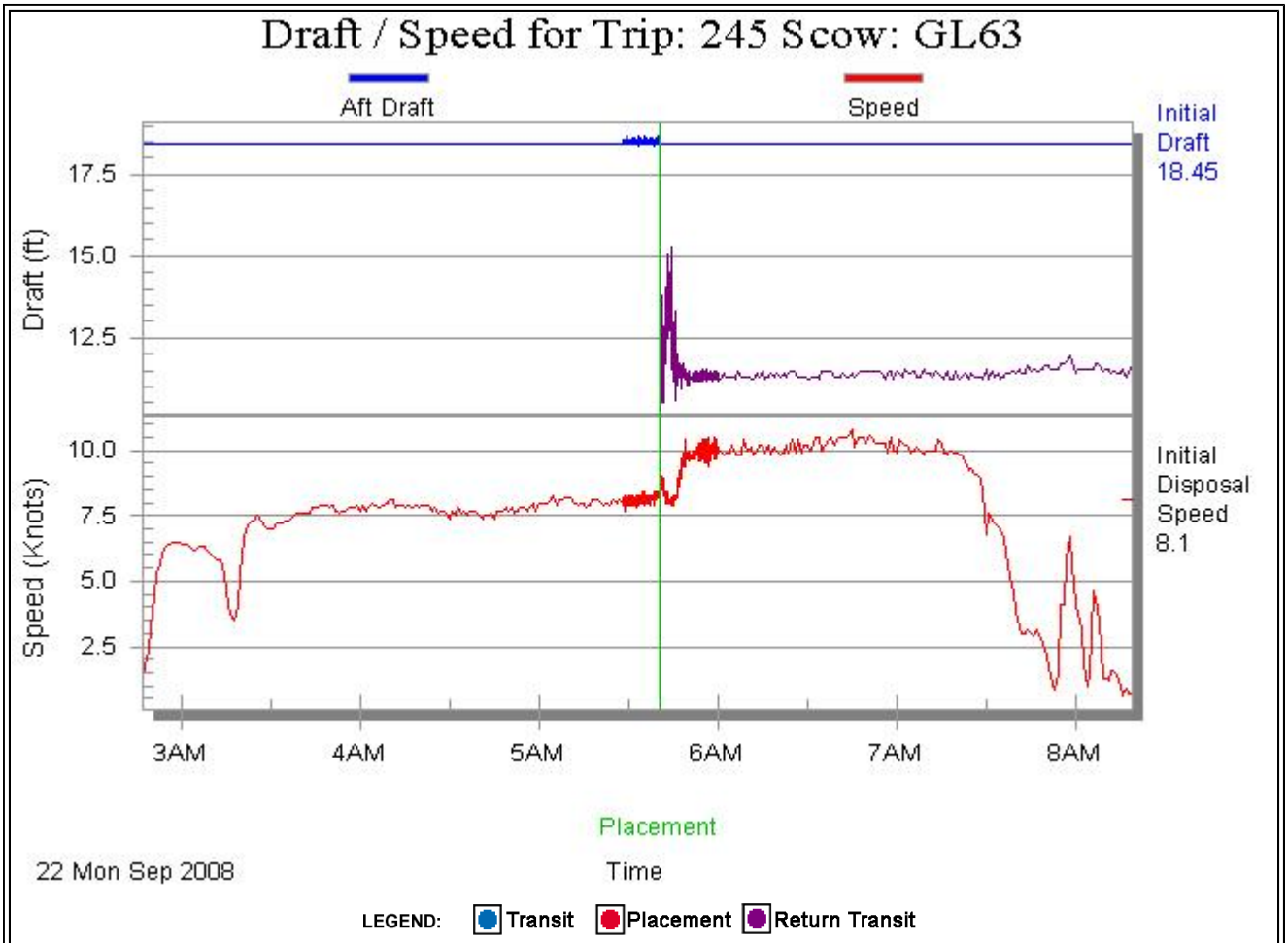


Trip Information

Trip #:	245
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/22/2008 02:46:51
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/22/2008 05:40:35
Latitude:	42.429327
Longitude:	-70.580149
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/22/2008 05:40:51
Latitude:	42.429488
Longitude:	-70.579326
Aft Draft:	11.86 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092208_153440

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

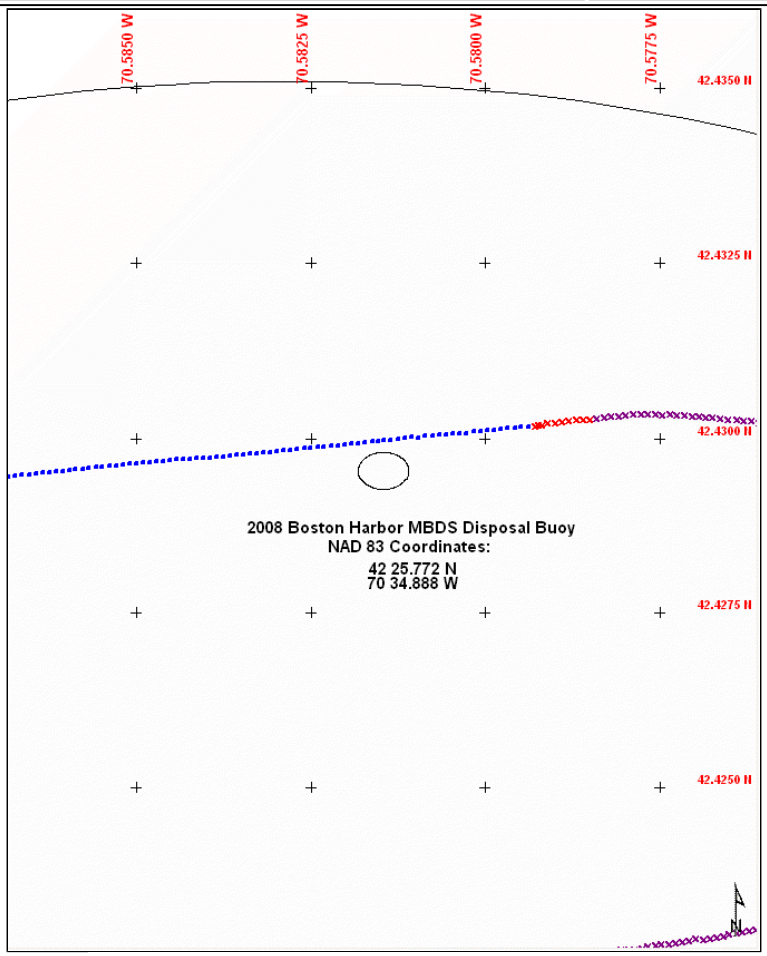
Trip #:	246
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/23/2008 15:10:16
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/23/2008 18:22:46	**Time:**	9/23/2008 18:23:02
Lat:	42.430177	**Lat:**	42.430270
Long:	-70.579292	**Long:**	-70.578508
Aft Draft:	18.53 ft	**Aft Draft:**	12.10 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/23/2008 3:10:16 PM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092408_104749

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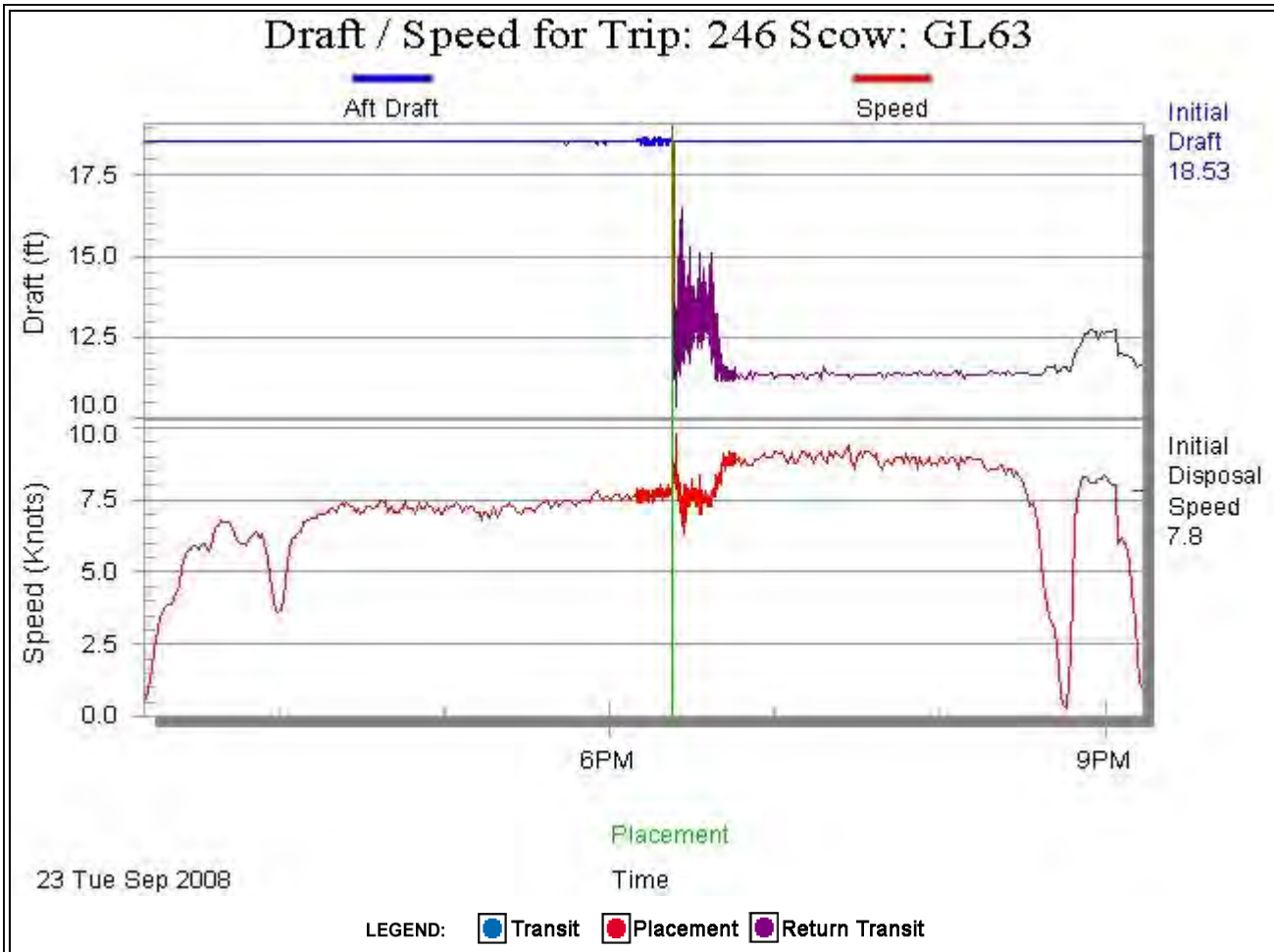

Trip Information

Trip #:	246
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/23/2008 15:10:16
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	9/23/2008 18:22:46	**Time:**	9/23/2008 18:23:02
Latitude:	42.430177	**Latitude:**	42.430270
Longitude:	-70.579292	**Longitude:**	-70.578508
Aft Draft:	18.53 ft	**Aft Draft:**	12.10 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092408_104749

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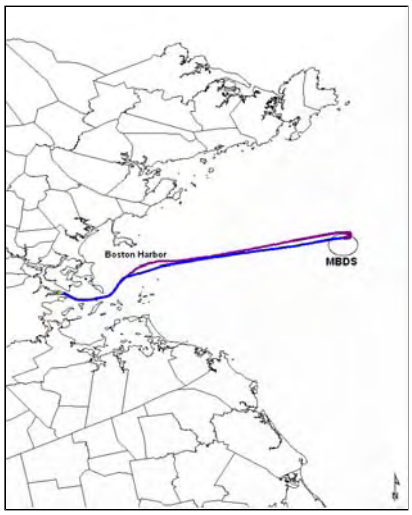
Trip Information:

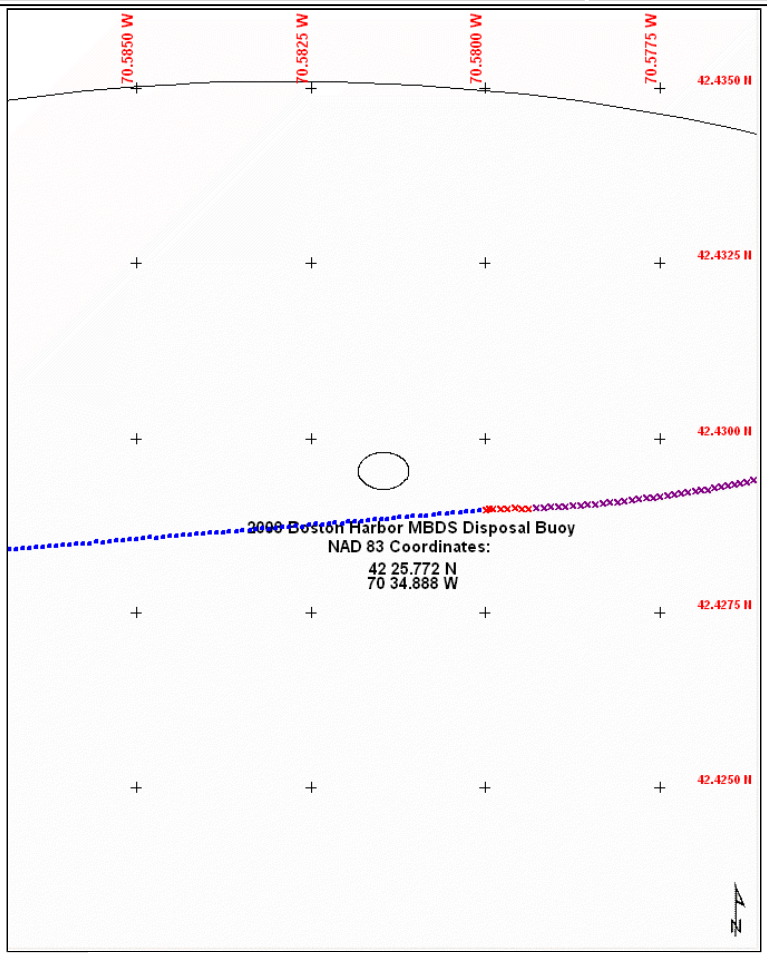
Trip #:	247
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/23/2008 21:46:19
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/24/2008 00:38:19	**Time:**	9/24/2008 00:38:31
Lat:	42.428967	**Lat:**	42.428981
Long:	-70.579986	**Long:**	-70.579373
Aft Draft:	20.32 ft	**Aft Draft:**	9.03 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/23/2008 9:46:19 PM (Local)
Wave Height: 3.6 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092408_105139

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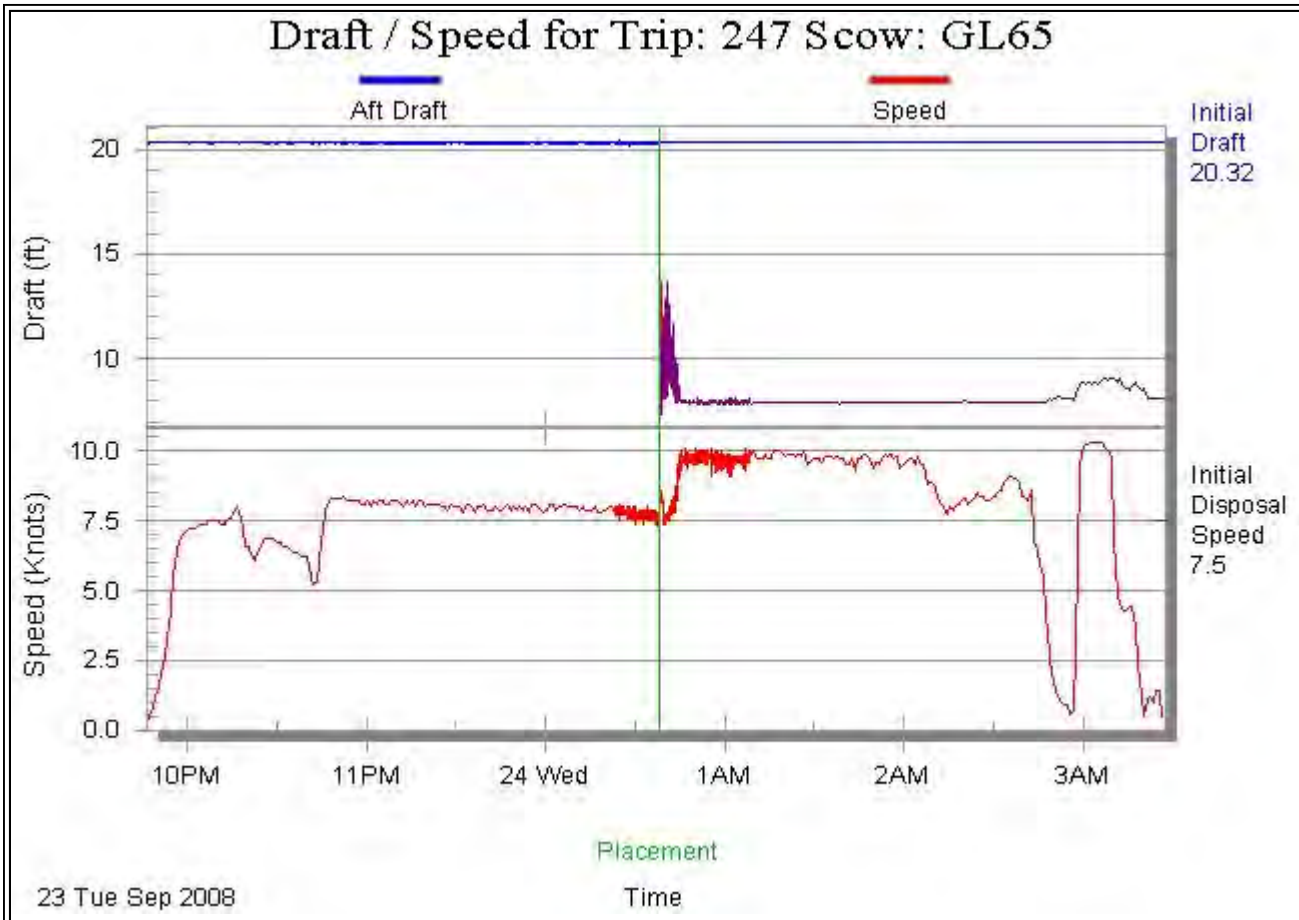

Trip Information

Trip #:	247
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/23/2008 21:46:19
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/24/2008 00:38:19	**Time:**	9/24/2008 00:38:31
Latitude:	42.428967	**Latitude:**	42.428981
Longitude:	-70.579986	**Longitude:**	-70.579373
Aft Draft:	20.32 ft	**Aft Draft:**	9.03 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092408_105139

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Trip Information:

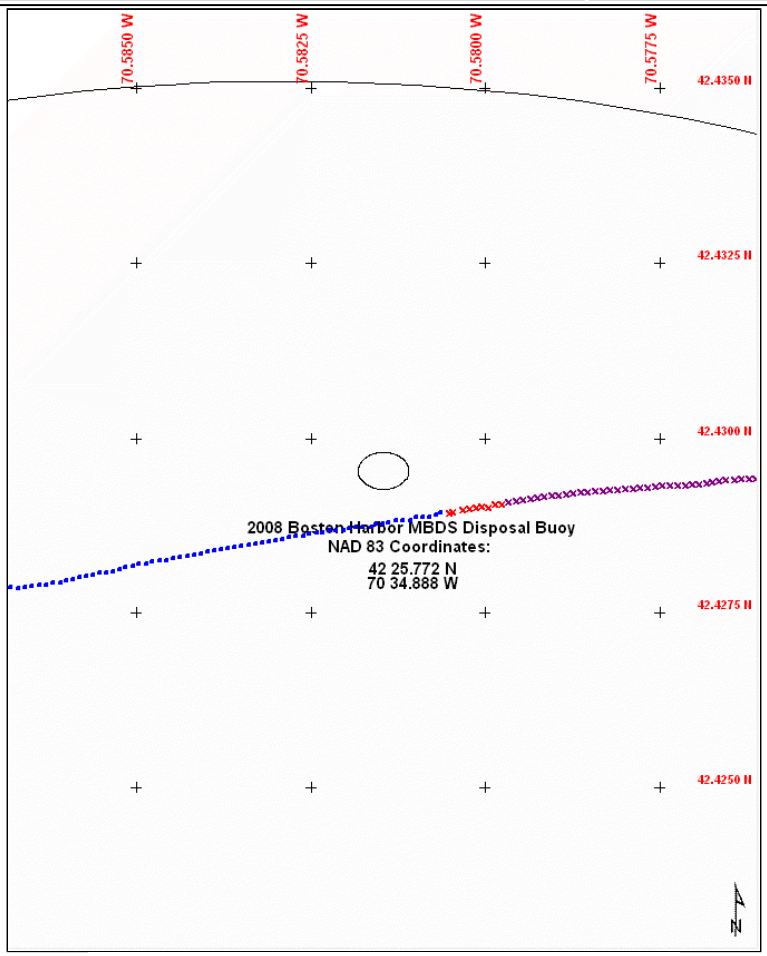
Trip #:	248
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/24/2008 03:51:50
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/24/2008 06:55:02	**Time:**	9/24/2008 06:55:18
Lat:	42.428918	**Lat:**	42.429048
Long:	-70.580518	**Long:**	-70.579764
Aft Draft:	18.53 ft	**Aft Draft:**	12.10 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/24/2008 3:51:50 AM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092408_115818

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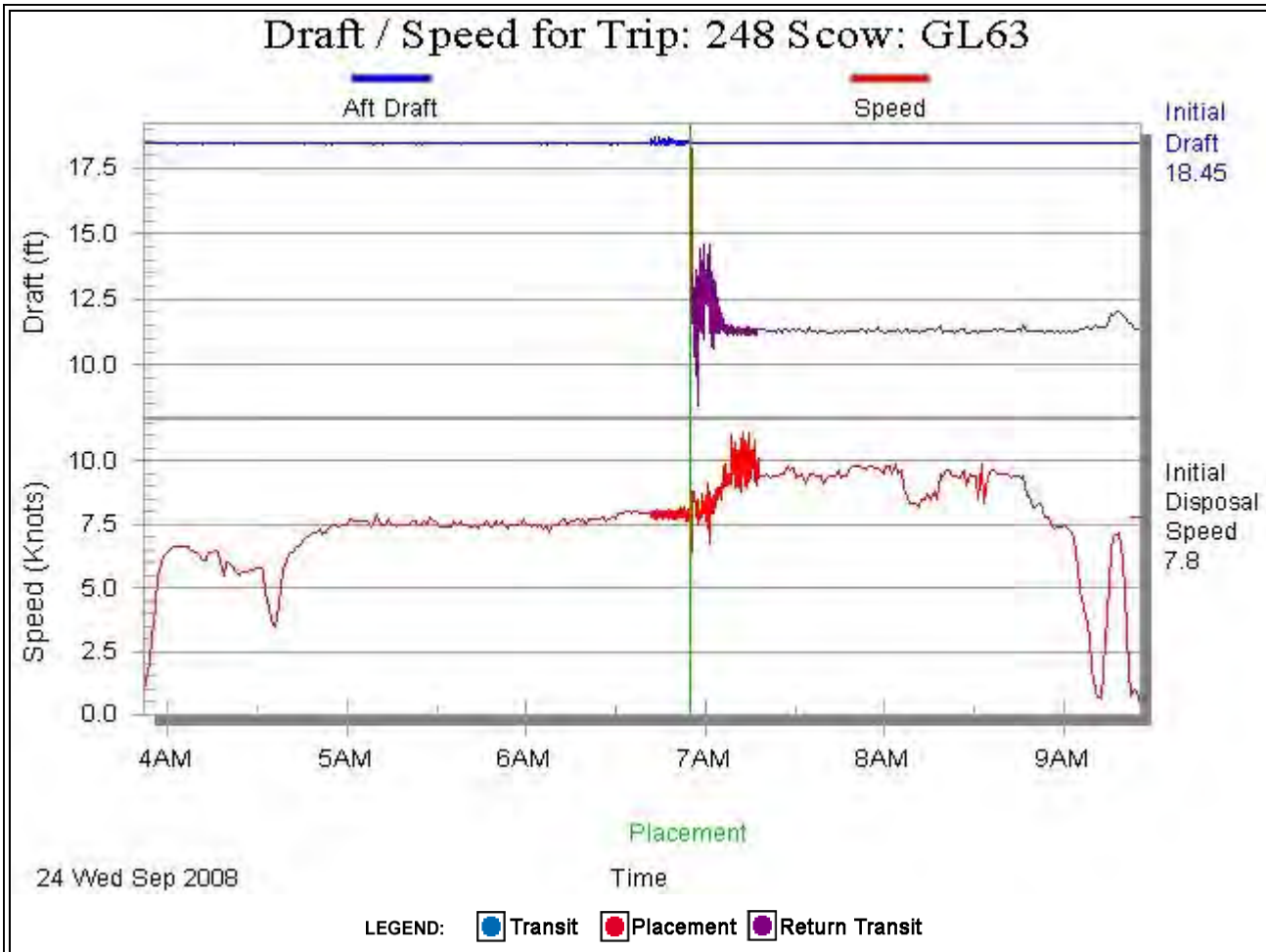

Trip Information

Trip #:	248
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/24/2008 03:51:50
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/24/2008 06:55:02	**Time:**	9/24/2008 06:55:18
Latitude:	42.428918	**Latitude:**	42.429048
Longitude:	-70.580518	**Longitude:**	-70.579764
Aft Draft:	18.53 ft	**Aft Draft:**	12.10 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092408_115818

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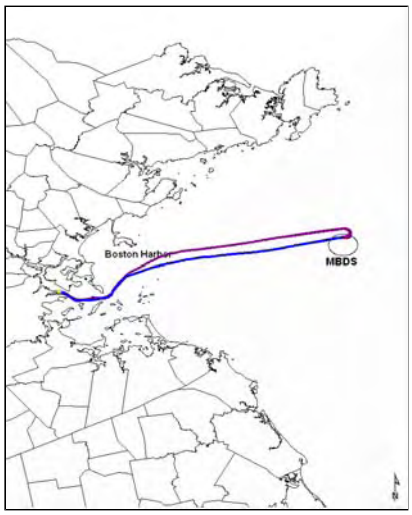
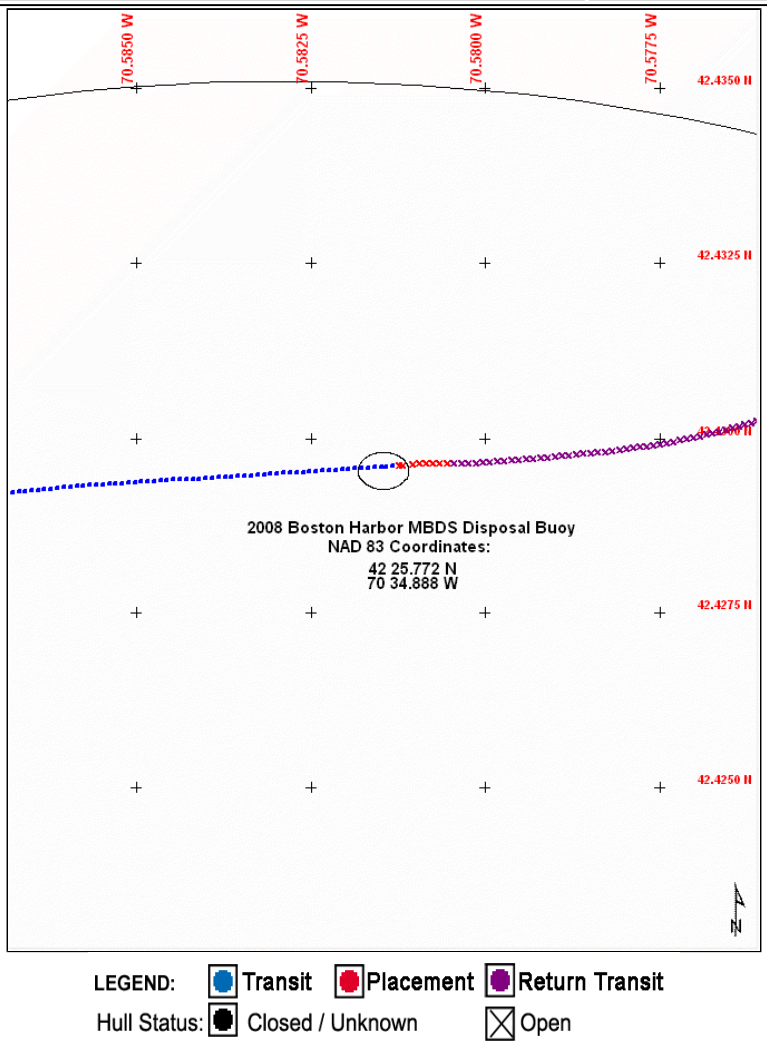
Trip Information:		**Placement Information:**			
		Placement Start:		**Placement End:**	
Trip #:	249	**Time:**	9/24/2008 15:07:33	**Time:**	9/24/2008 15:07:47
Tug:	Lemmerhirt	**Lat:**	42.429615	**Lat:**	42.429639
Captain(s):	Unknown	**Long:**	-70.581230	**Long:**	-70.580547
Scow:	GL65				
Type:	Split Hull Scow				
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	9/24/2008 12:13:29				
Init Aft Draft:	20.40 ft	**Aft Draft:**	20.47 ft	**Aft Draft:**	8.81 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/24/2008 11:54:00 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 7.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092508_104248

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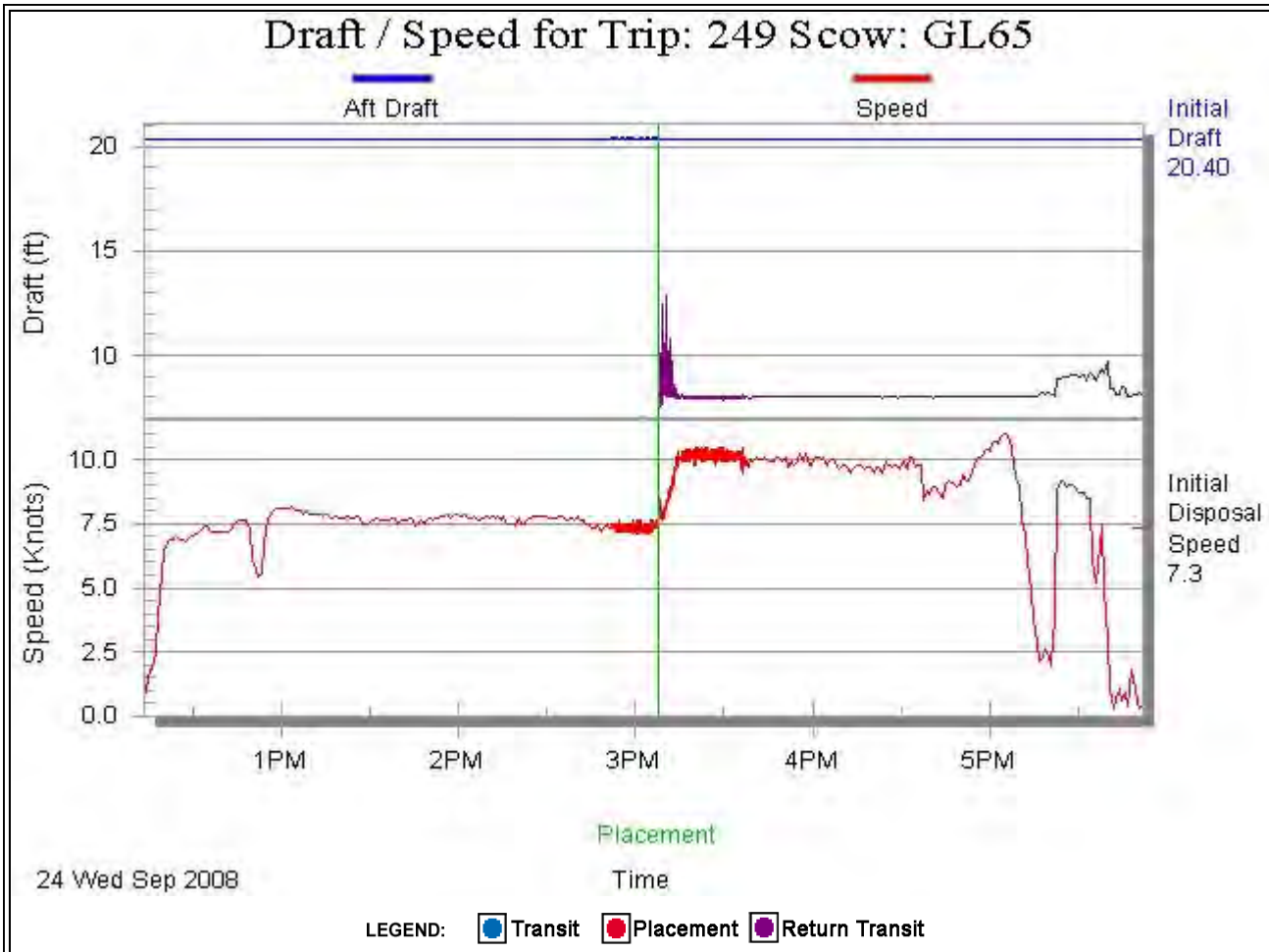

Trip Information

Trip #:	249
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	9/24/2008 12:13:29
Init Aft Draft:	20.40 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/24/2008 15:07:33
Latitude:	42.429615
Longitude:	-70.581230
Aft Draft:	20.47 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/24/2008 15:07:47
Latitude:	42.429639
Longitude:	-70.580547
Aft Draft:	8.81 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092508_104248

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W912WJ-07-C-0023

SAIC
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Trip Information:

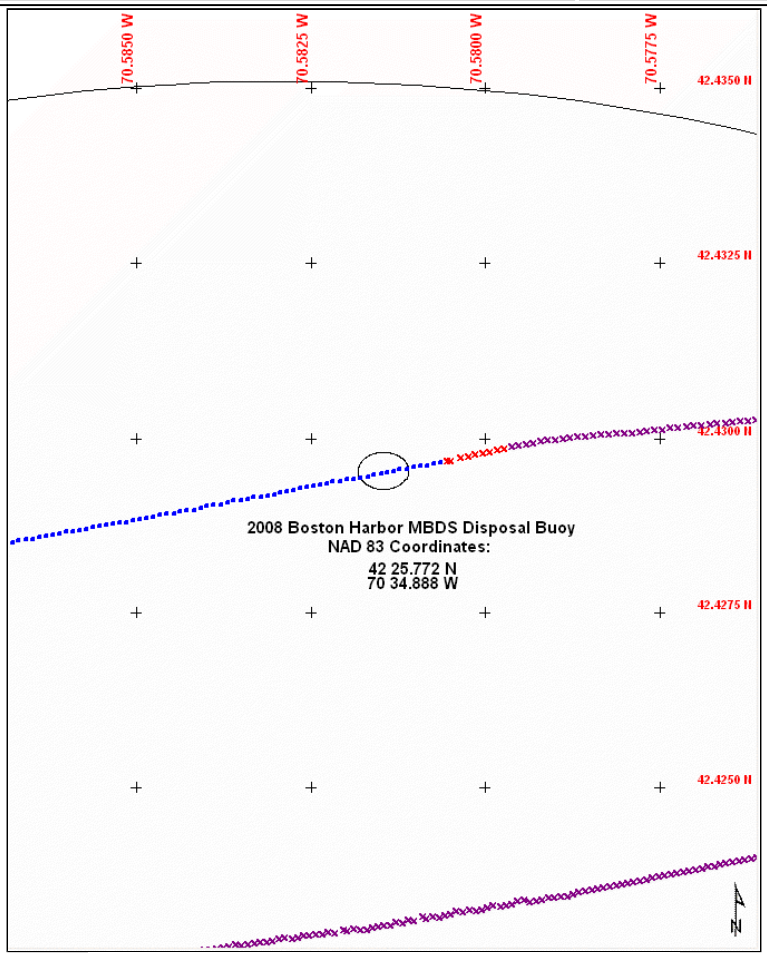
Trip #:	250
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/24/2008 18:20:30
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/24/2008 21:18:56	9/24/2008 21:19:12
Lat:	42.429681	42.429847
Long:	-70.580550	-70.579733
Aft Draft:	18.53 ft	12.42 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/24/2008 6:12:00 PM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #250.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092508_104440

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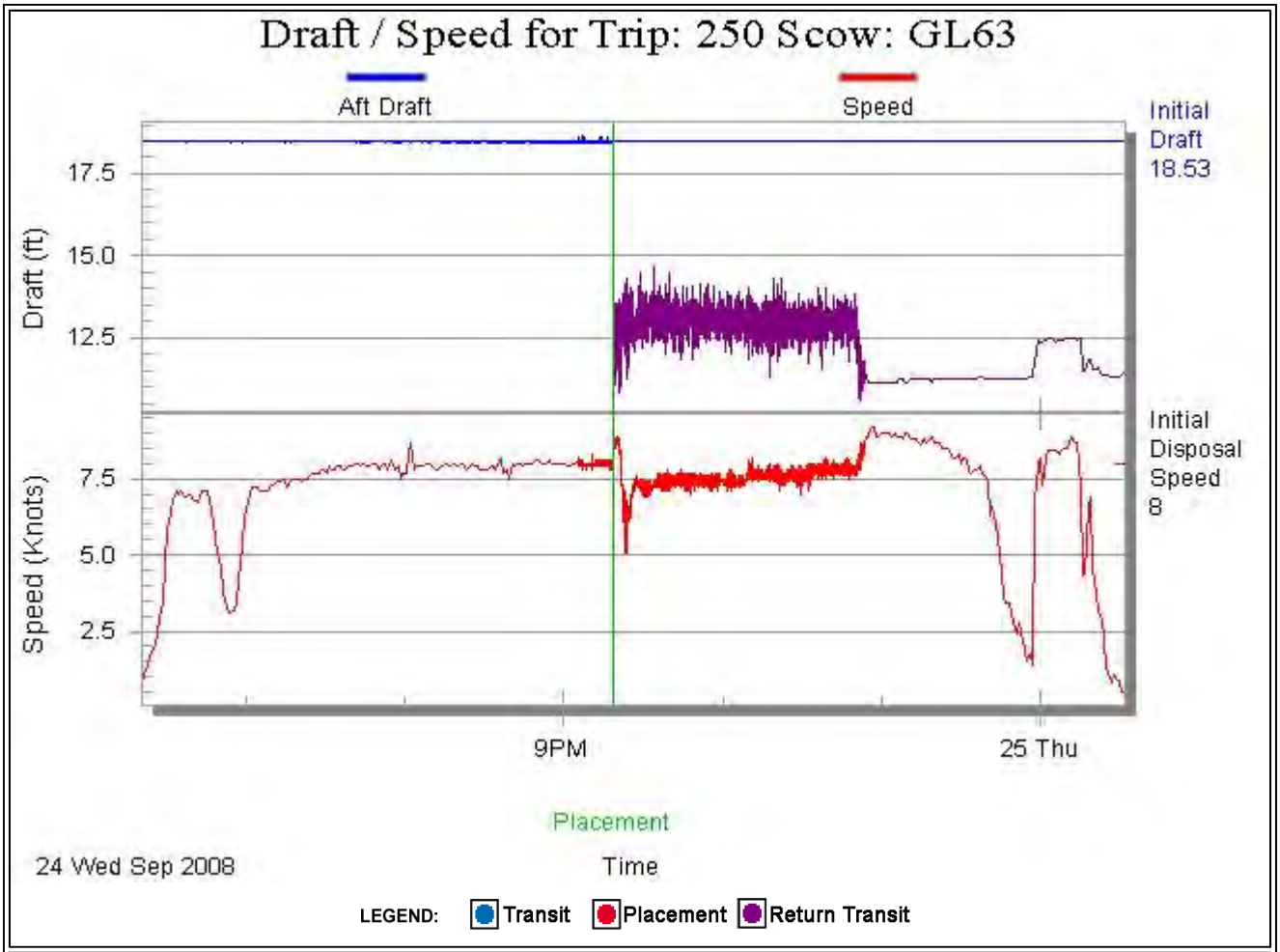

Trip Information

Trip #:	250
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/24/2008 18:20:30
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/24/2008 21:18:56	**Time:**	9/24/2008 21:19:12
Latitude:	42.429681	**Latitude:**	42.429847
Longitude:	-70.580550	**Longitude:**	-70.579733
Aft Draft:	18.53 ft	**Aft Draft:**	12.42 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #250.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092508_104440

2008 Boston Harbor Maintenance Dredging
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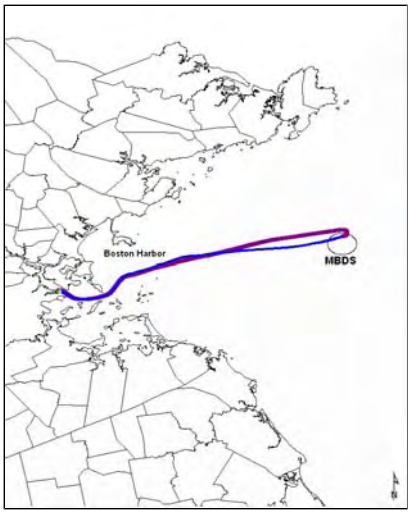
Trip Information:

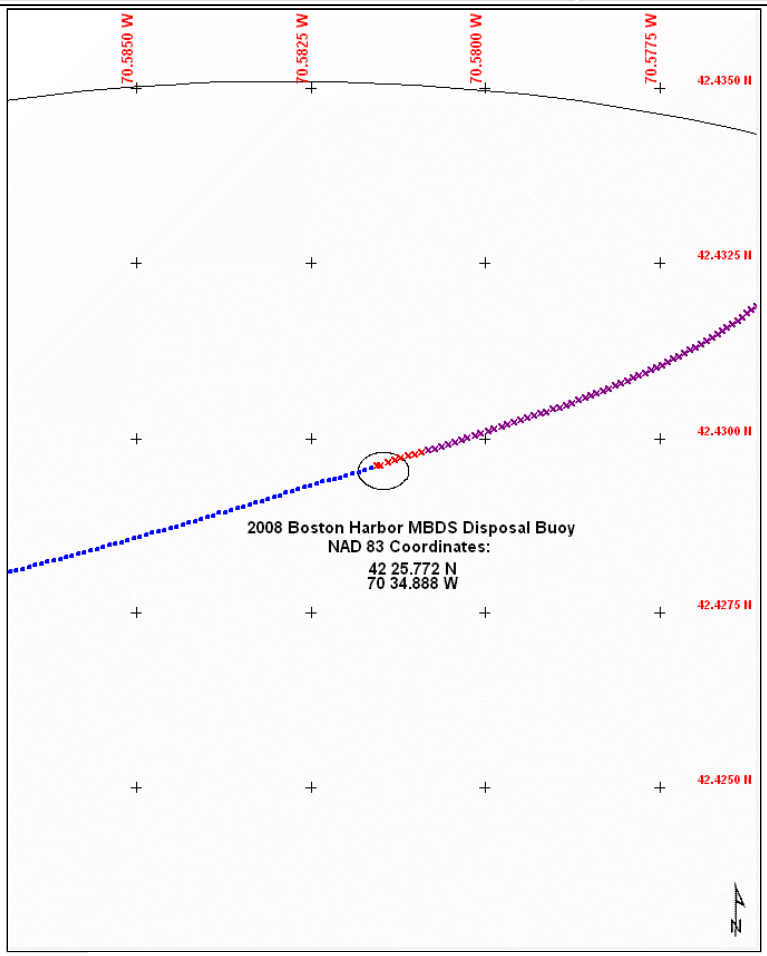
Trip #:	251
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/25/2008 02:11:51
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/25/2008 05:09:33	**Time:**	9/25/2008 05:09:47
Lat:	42.429607	**Lat:**	42.429802
Long:	-70.581562	**Long:**	-70.580914
Aft Draft:	20.25 ft	**Aft Draft:**	8.07 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/25/2008 12:42:00 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #251.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092508_104526

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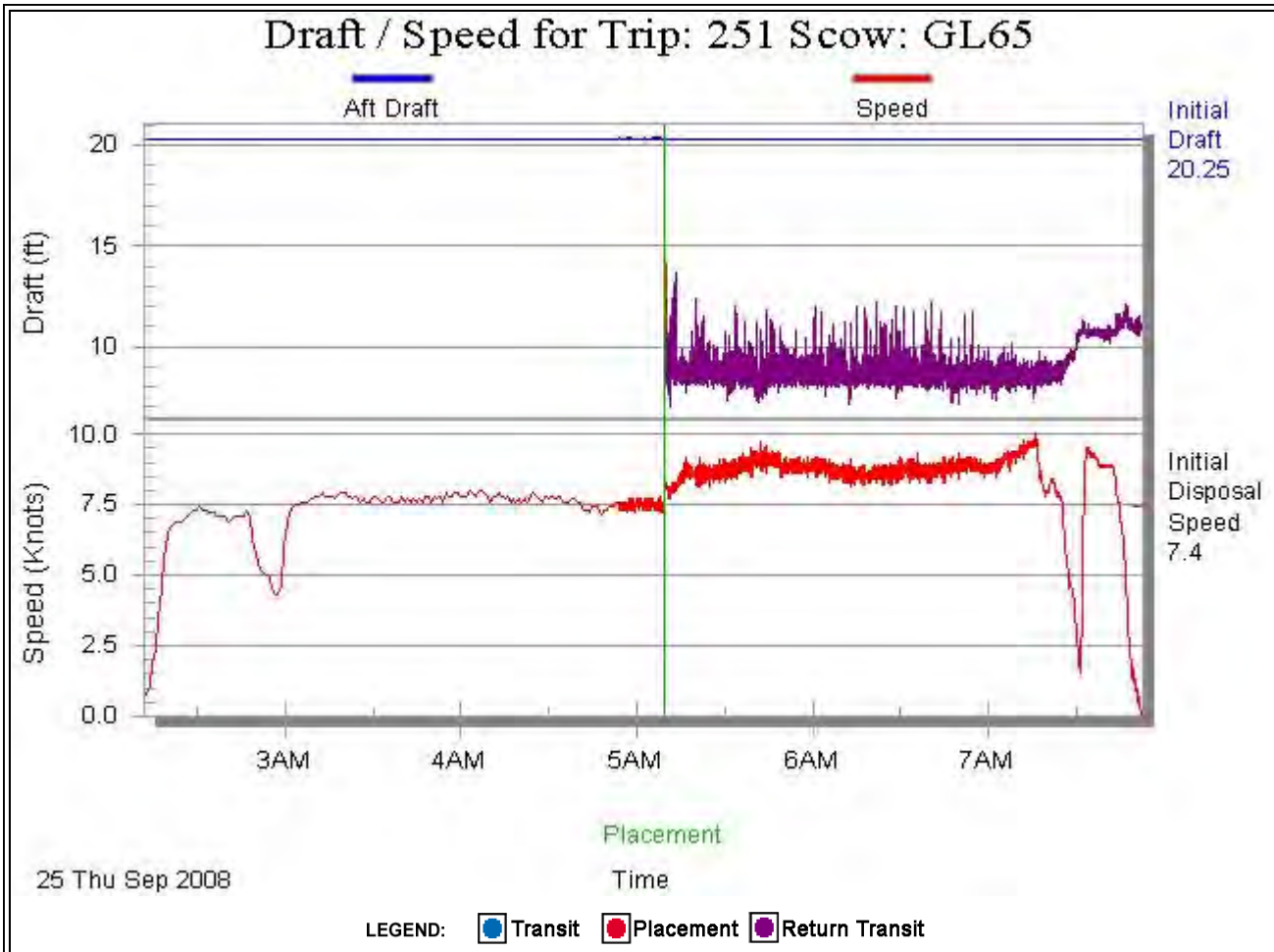


Trip Information

Trip #:	251
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/25/2008 02:11:51
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	9/25/2008 05:09:33	**Time:**	9/25/2008 05:09:47
Latitude:	42.429607	**Latitude:**	42.429802
Longitude:	-70.581562	**Longitude:**	-70.580914
Aft Draft:	20.25 ft	**Aft Draft:**	8.07 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.The hull status sensor indicated that the scow remained open throughout the return transit of load #251.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092508_104526

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

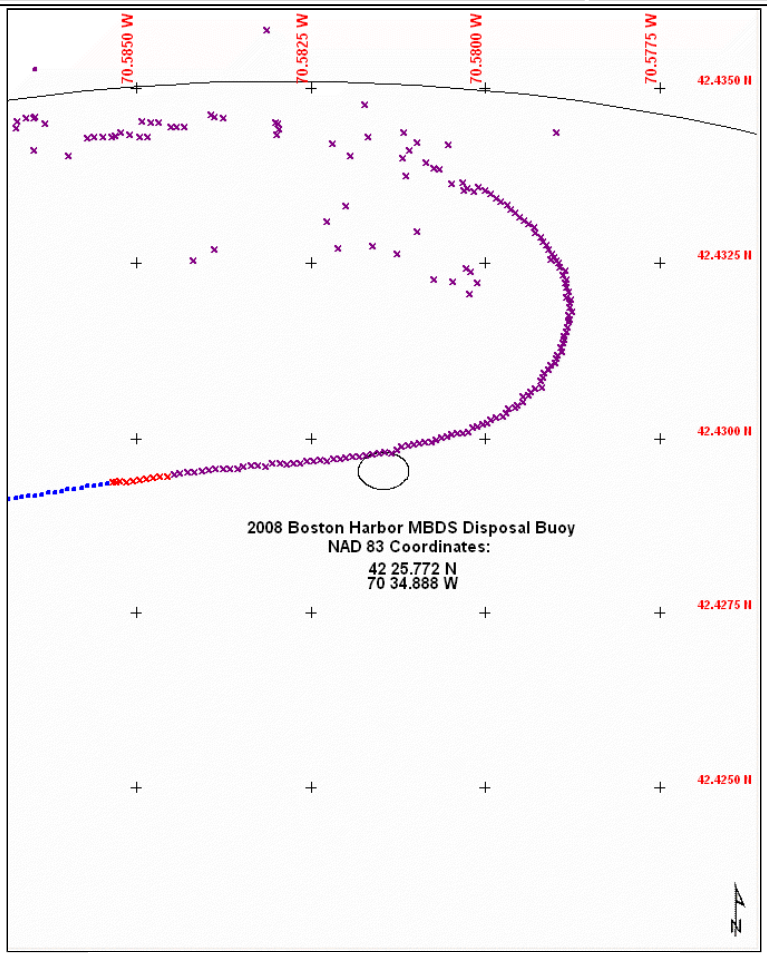
Trip #:	252
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/25/2008 14:52:44
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/25/2008 17:35:57	**Time:**	9/25/2008 17:36:13
Lat:	42.429328	**Lat:**	42.429435
Long:	-70.585319	**Long:**	-70.584551
Aft Draft:	18.53 ft	**Aft Draft:**	12.18 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/25/2008 2:41:00 PM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 092608_100434

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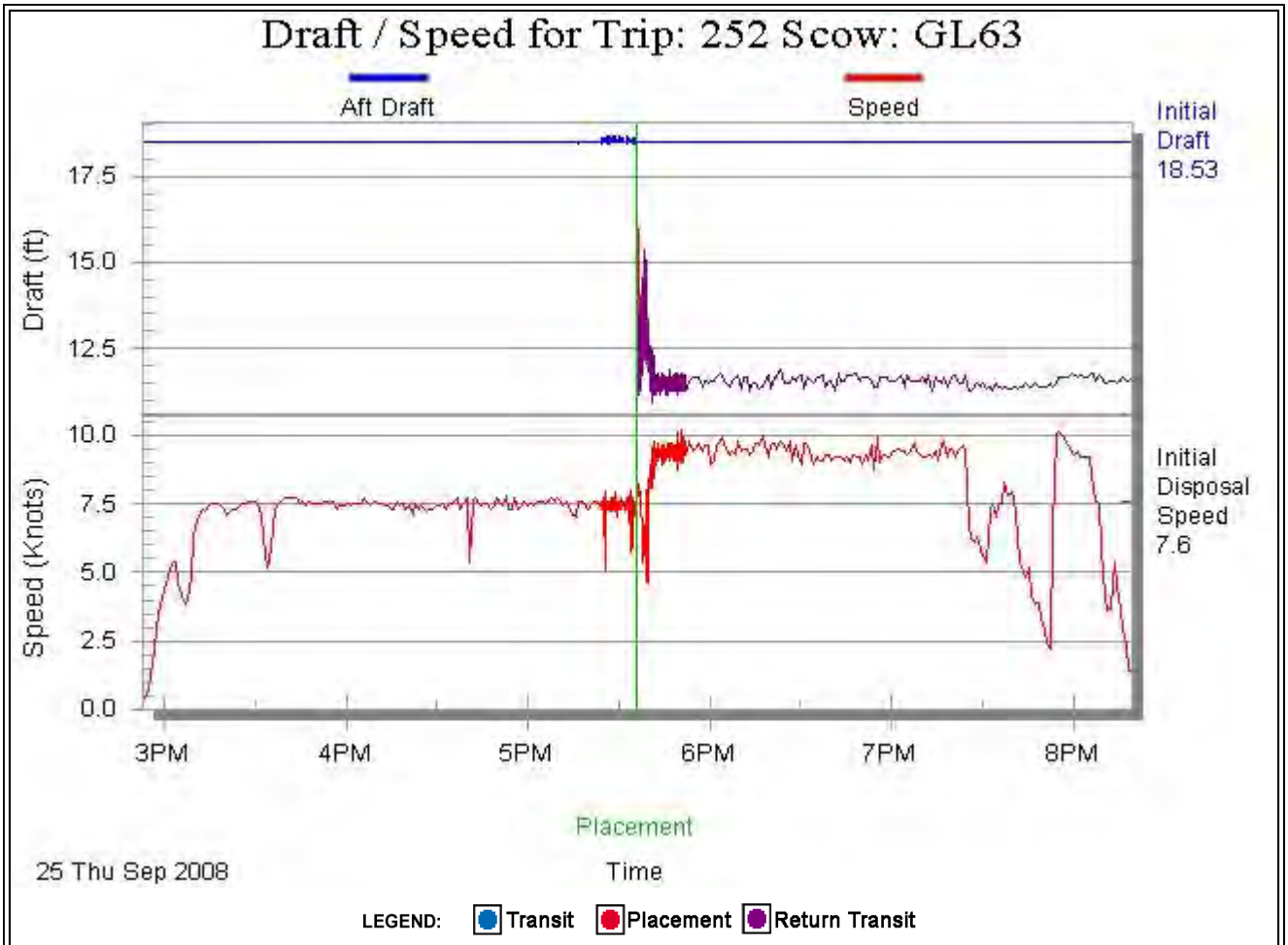

Trip Information

Trip #:	252
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/25/2008 14:52:44
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/25/2008 17:35:57	**Time:**	9/25/2008 17:36:13
Latitude:	42.429328	**Latitude:**	42.429435
Longitude:	-70.585319	**Longitude:**	-70.584551
Aft Draft:	18.53 ft	**Aft Draft:**	12.18 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 092608_100434

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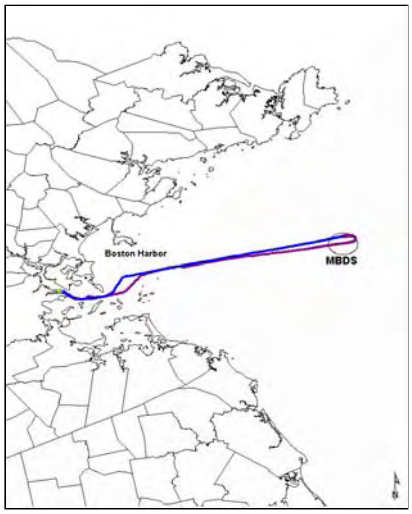
Trip Information:

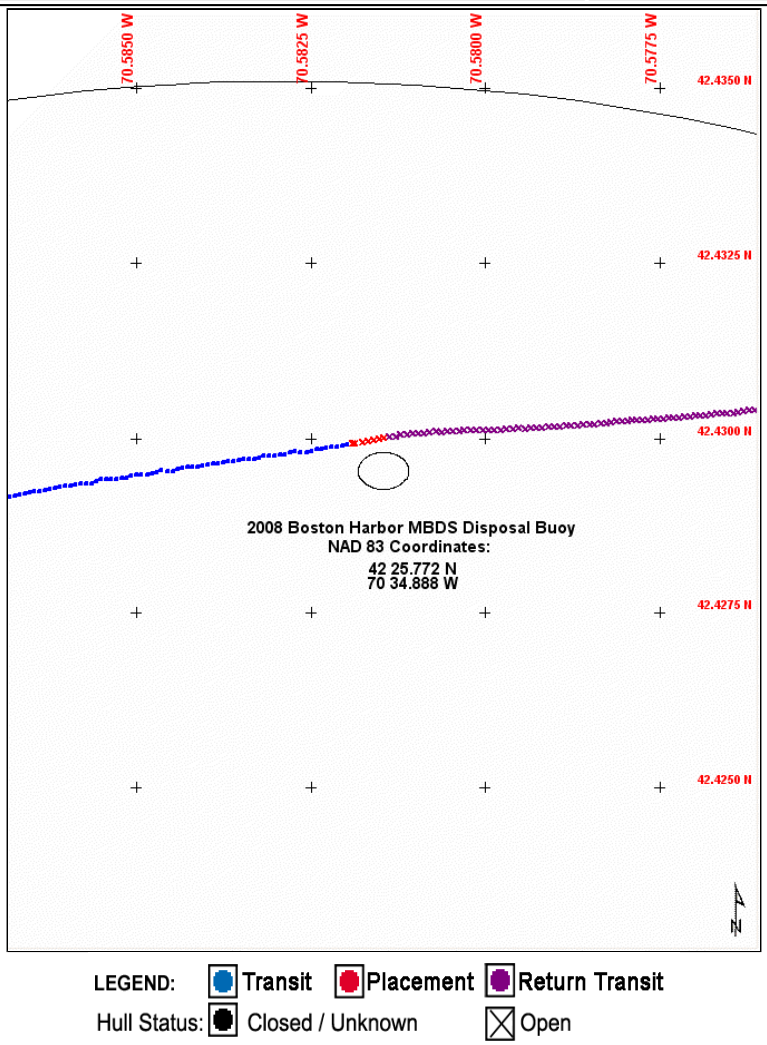
Trip #:	253
Tug:	
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	9/29/2008 05:03:07
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/29/2008 08:40:17	**Time:**	9/29/2008 08:40:29
Lat:	42.429926	**Lat:**	42.430004
Long:	-70.581917	**Long:**	-70.581448
Aft Draft:	20.32 ft	**Aft Draft:**	8.51 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/29/2008 5:03:07 AM (Local)
Wave Height: 3.9 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100908_090235

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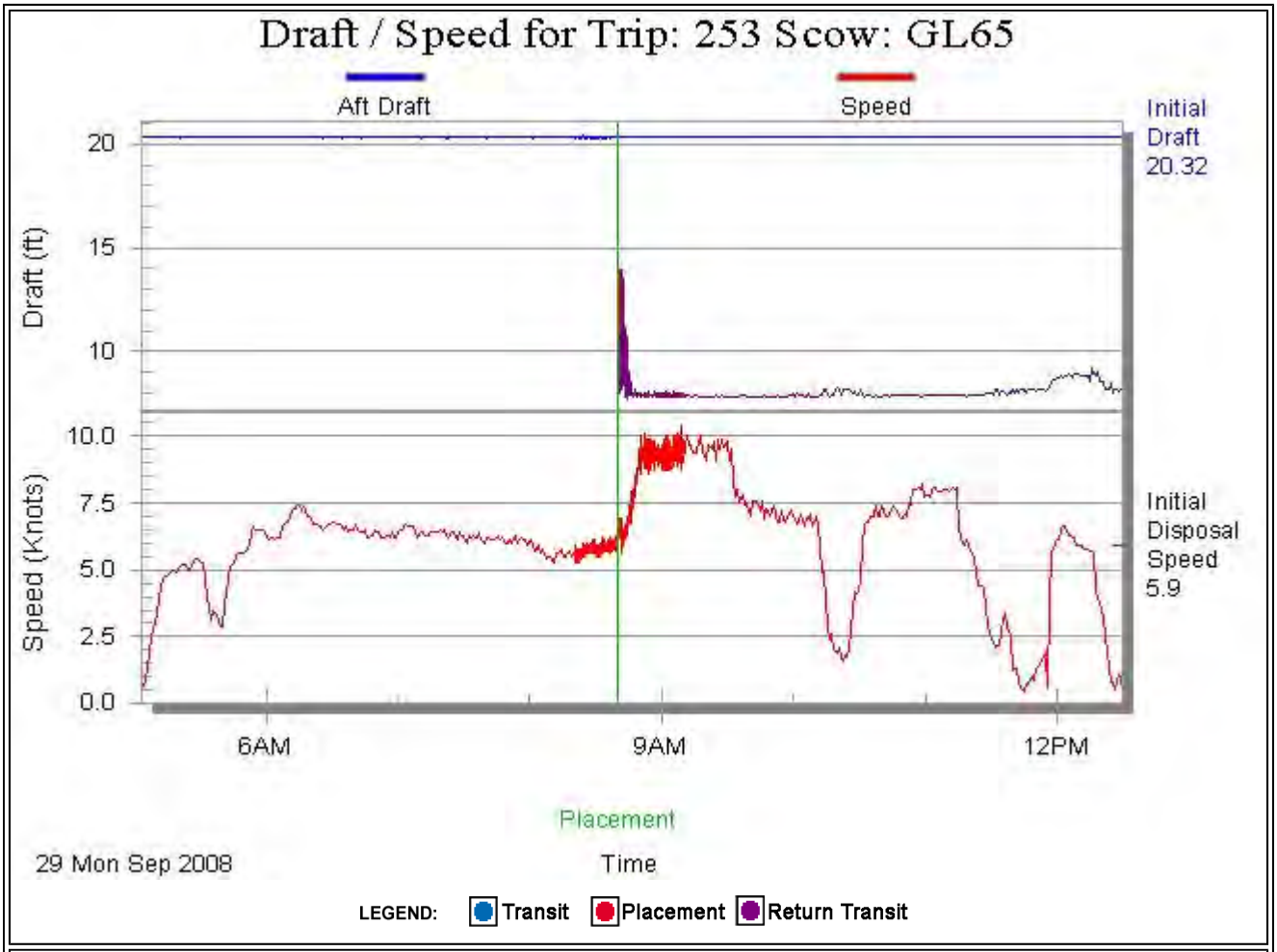

Trip Information

Trip #:	253
Tug Name:	
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	9/29/2008 05:03:07
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	9/29/2008 08:40:17	**Time:**	9/29/2008 08:40:29
Latitude:	42.429926	**Latitude:**	42.430004
Longitude:	-70.581917	**Longitude:**	-70.581448
Aft Draft:	20.32 ft	**Aft Draft:**	8.51 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100908_090235

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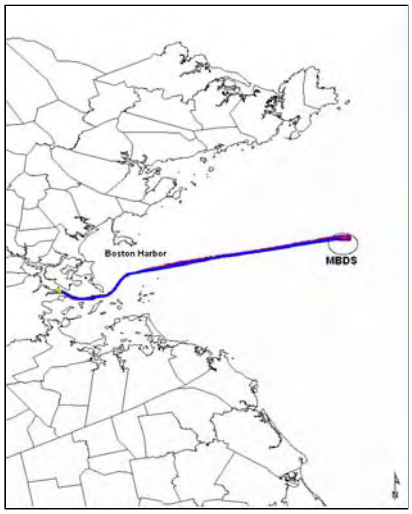
Trip Information:

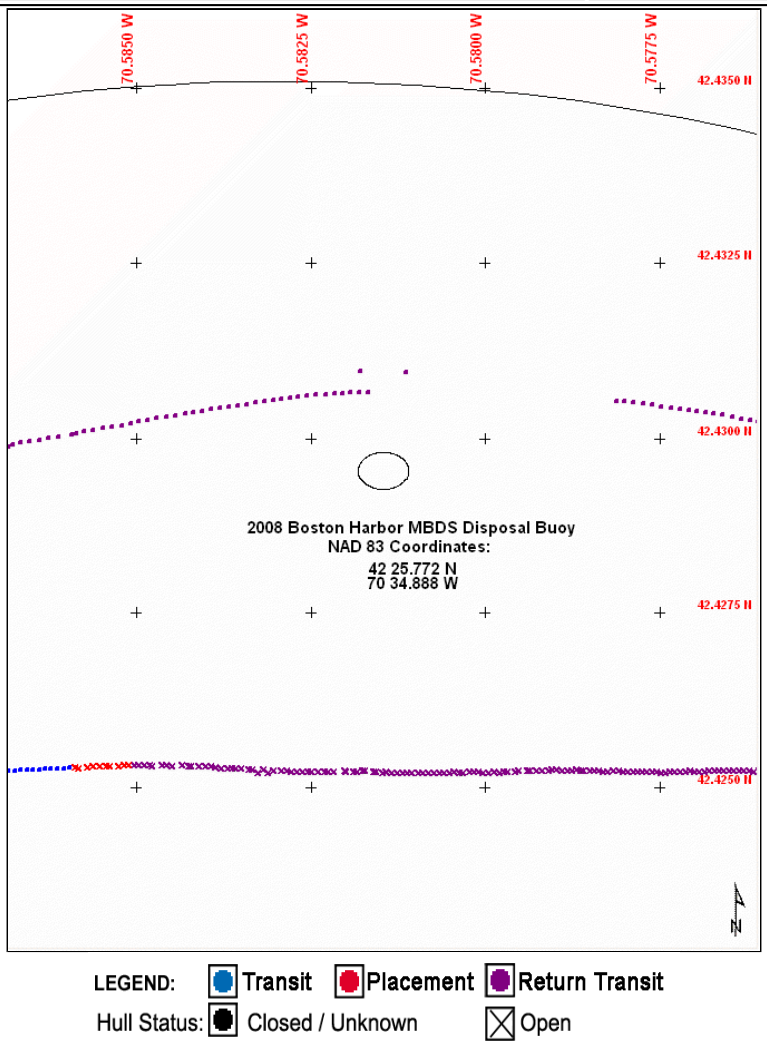
Trip #:	254
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/29/2008 13:15:46
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/29/2008 16:10:54	**Time:**	9/29/2008 16:11:12
Lat:	42.425282	**Lat:**	42.425313
Long:	-70.585871	**Long:**	-70.585110
Aft Draft:	18.61 ft	**Aft Draft:**	11.63 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/29/2008 4:34:00 PM (Local)
Wave Height: 4.3 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_161536

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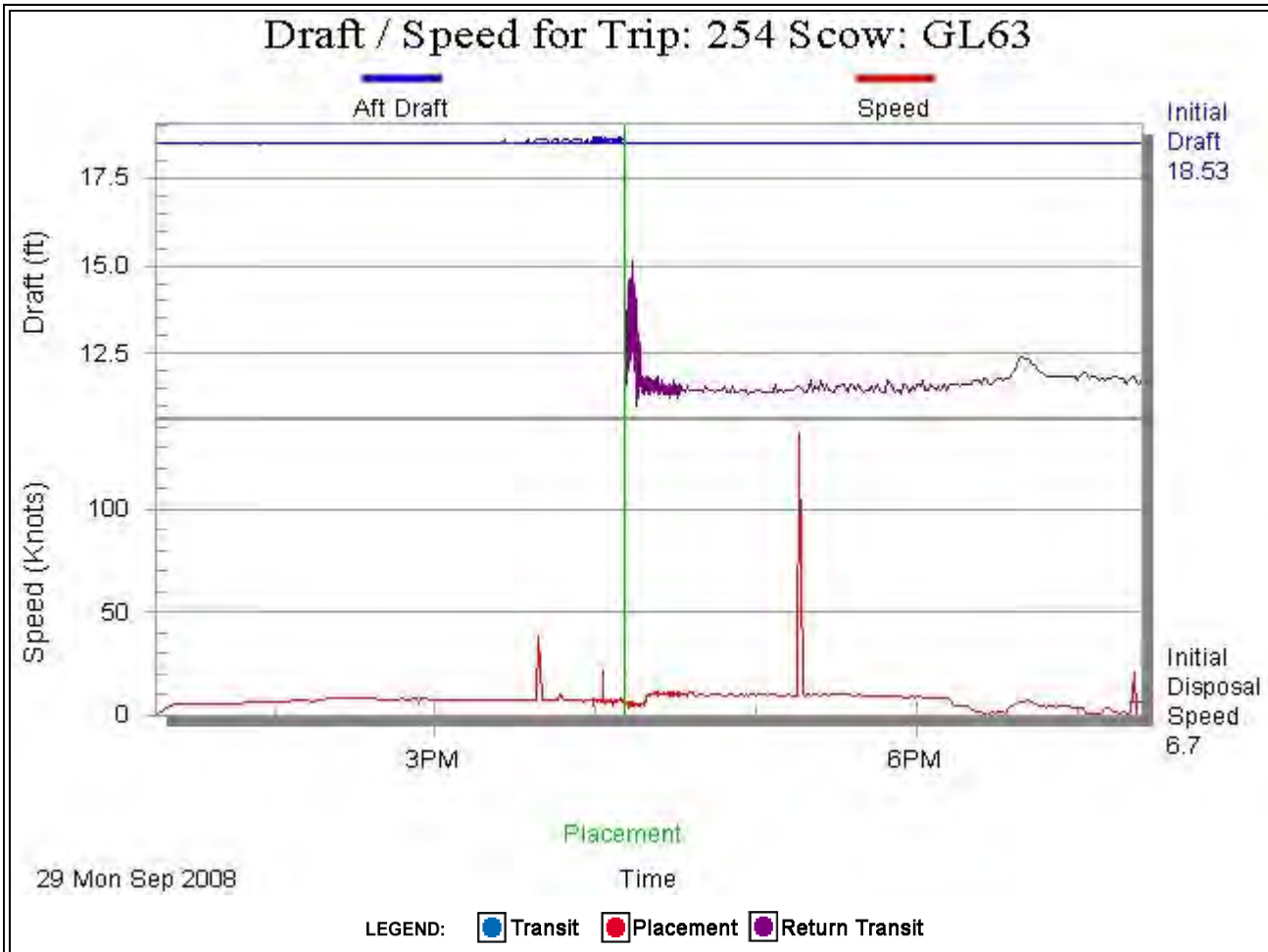

Trip Information

Trip #:	254
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/29/2008 13:15:46
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/29/2008 16:10:54
Latitude:	42.425282
Longitude:	-70.585871
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/29/2008 16:11:12
Latitude:	42.425313
Longitude:	-70.585110
Aft Draft:	11.63 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_161536

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Trip Information:

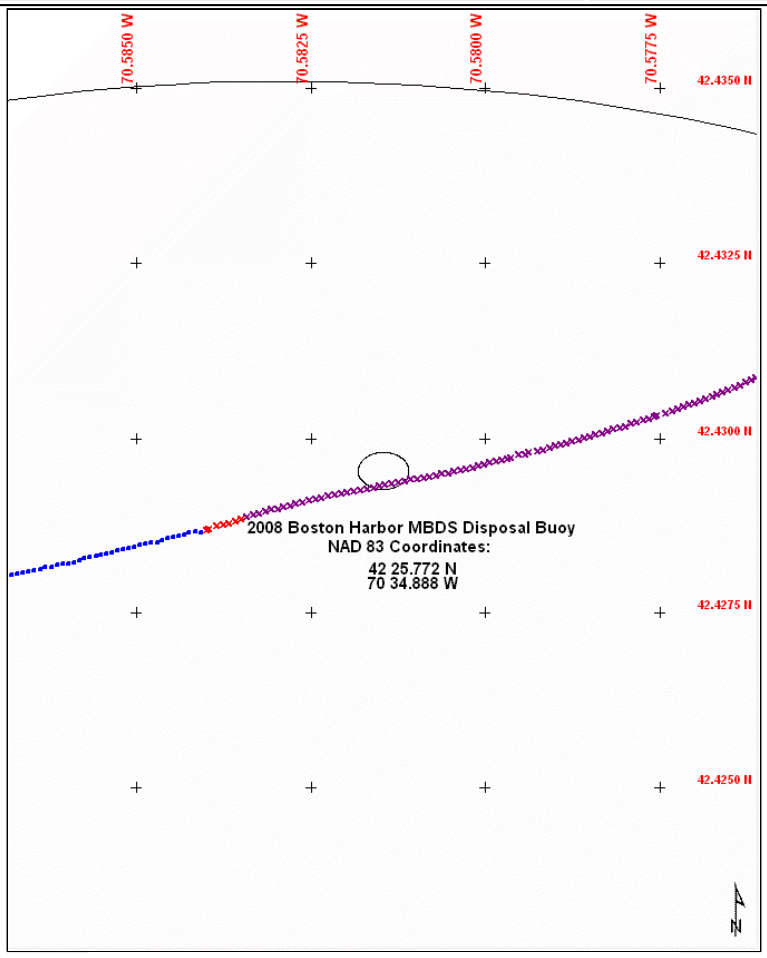
Trip #:	255
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/29/2008 20:12:47
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/29/2008 23:07:17	**Time:**	9/29/2008 23:07:29
Lat:	42.428673	**Lat:**	42.428837
Long:	-70.583991	**Long:**	-70.583509
Aft Draft:	20.32 ft	**Aft Draft:**	9.10 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/29/2008 7:43:00 PM (Local)
Wave Height: 4.3 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_161933

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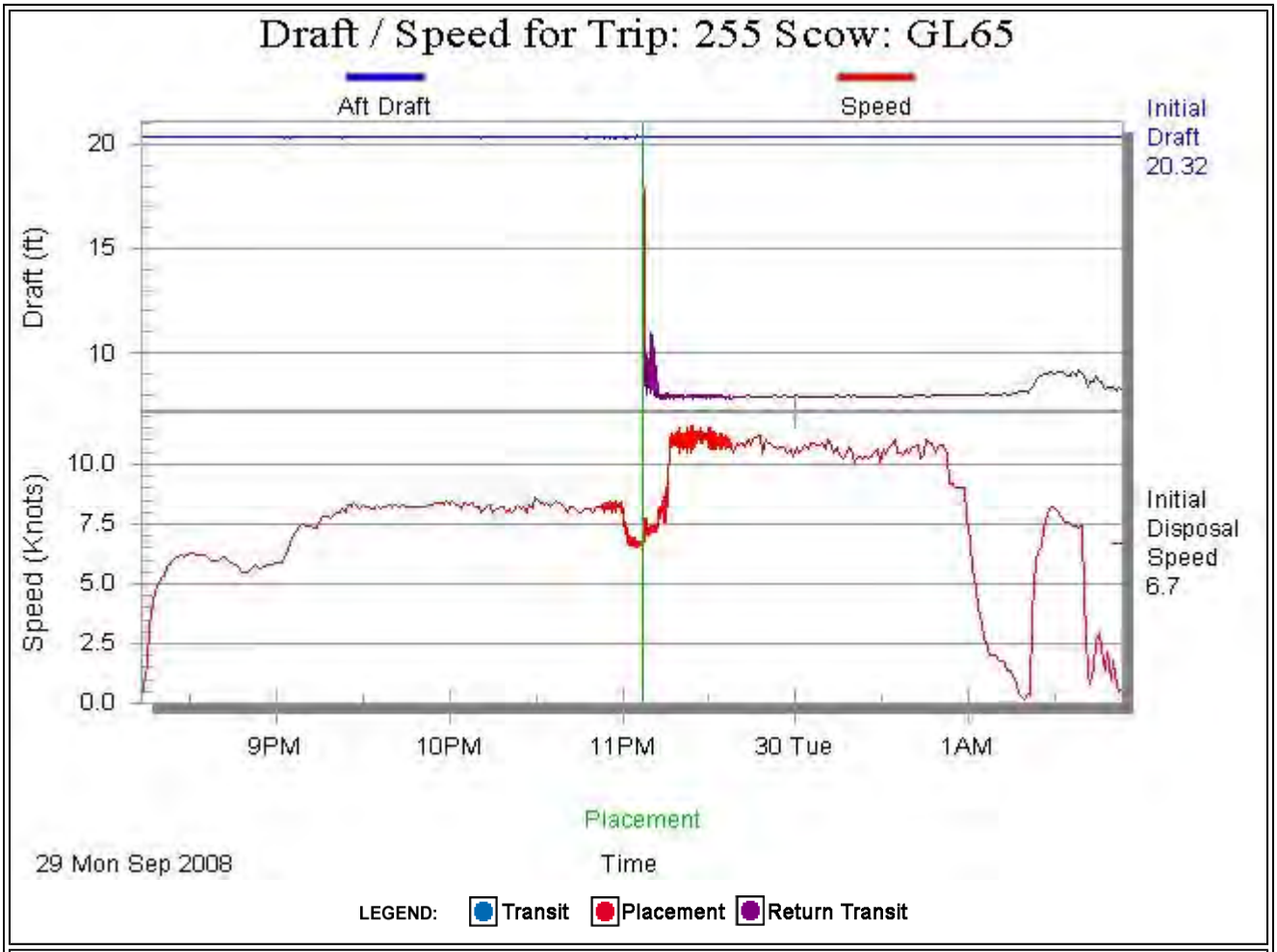

Trip Information

Trip #:	255
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/29/2008 20:12:47
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/29/2008 23:07:17
Latitude:	42.428673
Longitude:	-70.583991
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/29/2008 23:07:29
Latitude:	42.428837
Longitude:	-70.583509
Aft Draft:	9.10 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_161933

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Trip Information:

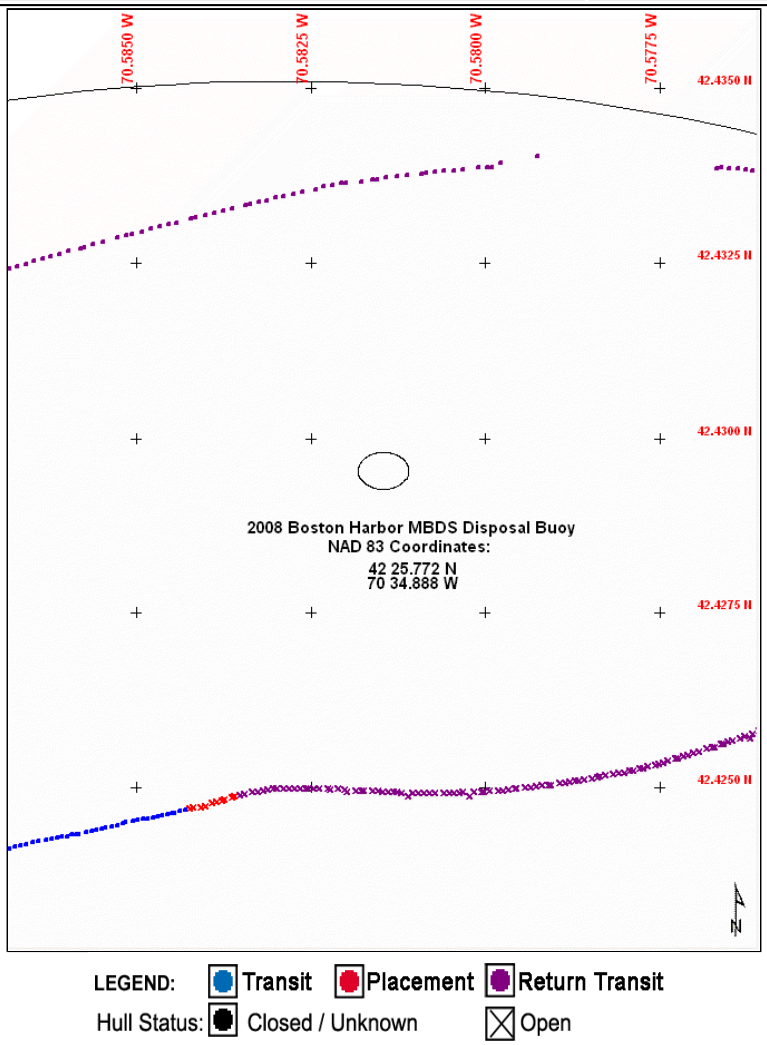
Trip #:	256
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 02:22:12
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/30/2008 05:02:41	**Time:**	9/30/2008 05:02:59
Lat:	42.424703	**Lat:**	42.424869
Long:	-70.584226	**Long:**	-70.583600
Aft Draft:	18.45 ft	**Aft Draft:**	12.02 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/30/2008 2:22:00 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_162348

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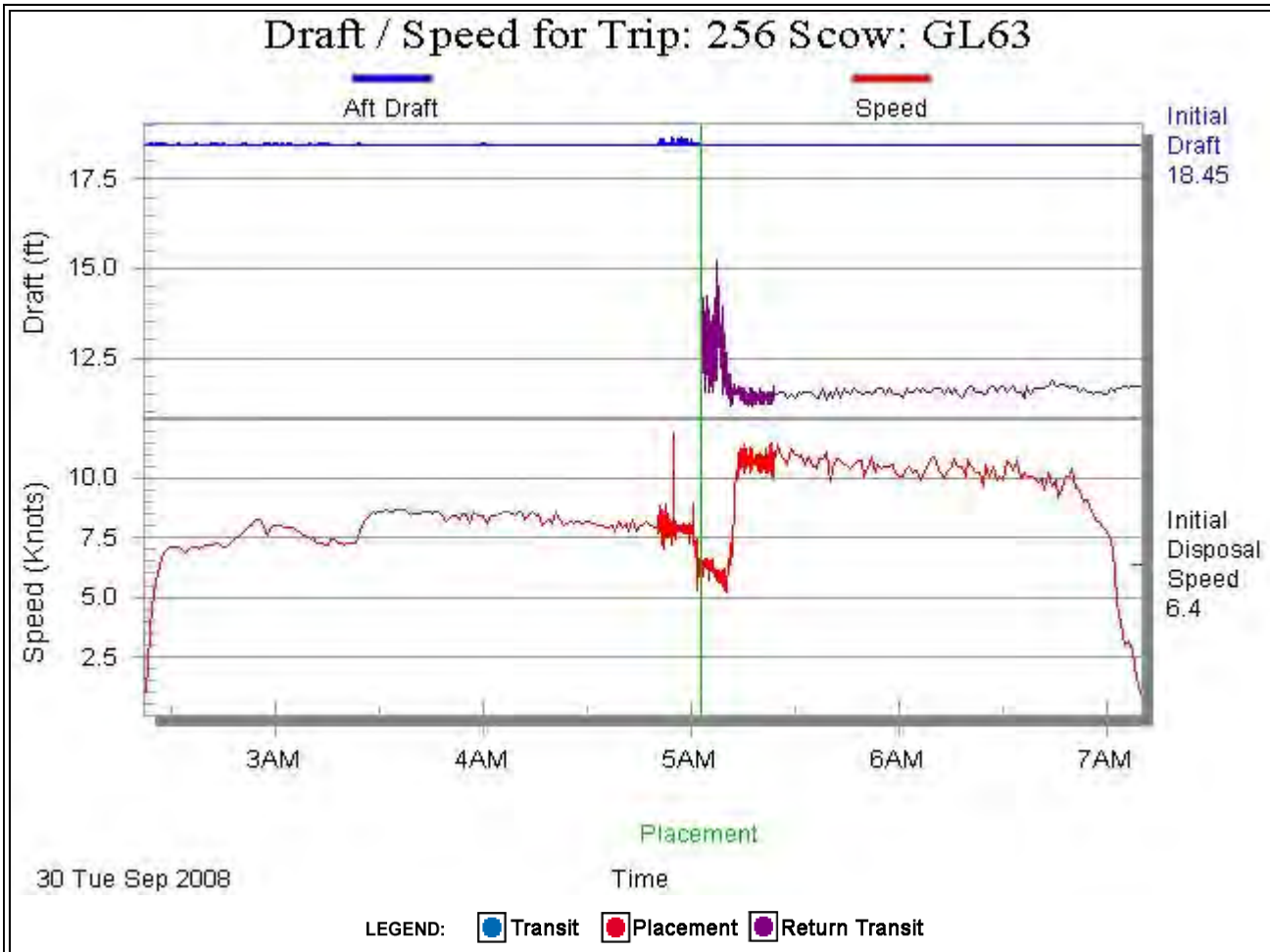

Trip Information

Trip #:	256
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 02:22:12
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/30/2008 05:02:41
Latitude:	42.424703
Longitude:	-70.584226
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/30/2008 05:02:59
Latitude:	42.424869
Longitude:	-70.583600
Aft Draft:	12.02 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_162348

2008 Boston Harbor Maintenance Dredging
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Trip Information:

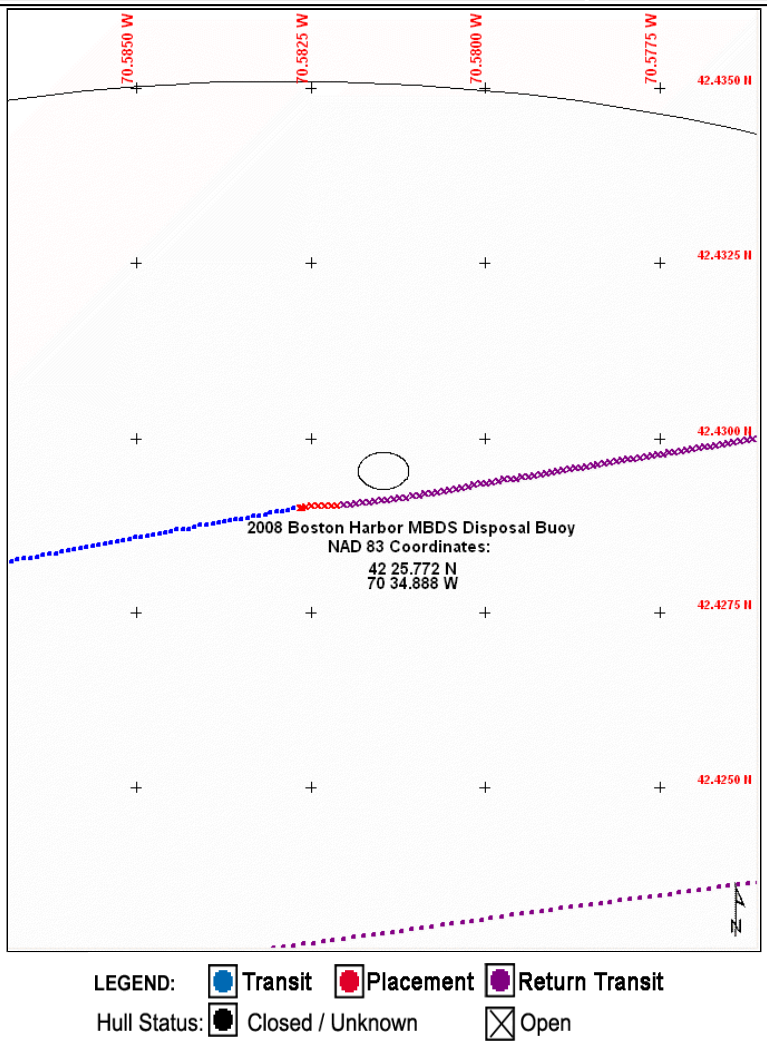
Trip #:	257
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 08:56:31
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	9/30/2008 11:50:08	9/30/2008 11:50:20
Lat:	42.428987	42.429023
Long:	-70.582667	-70.582130
Aft Draft:	20.32 ft	9.10 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/30/2008 8:13:00 AM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_162839

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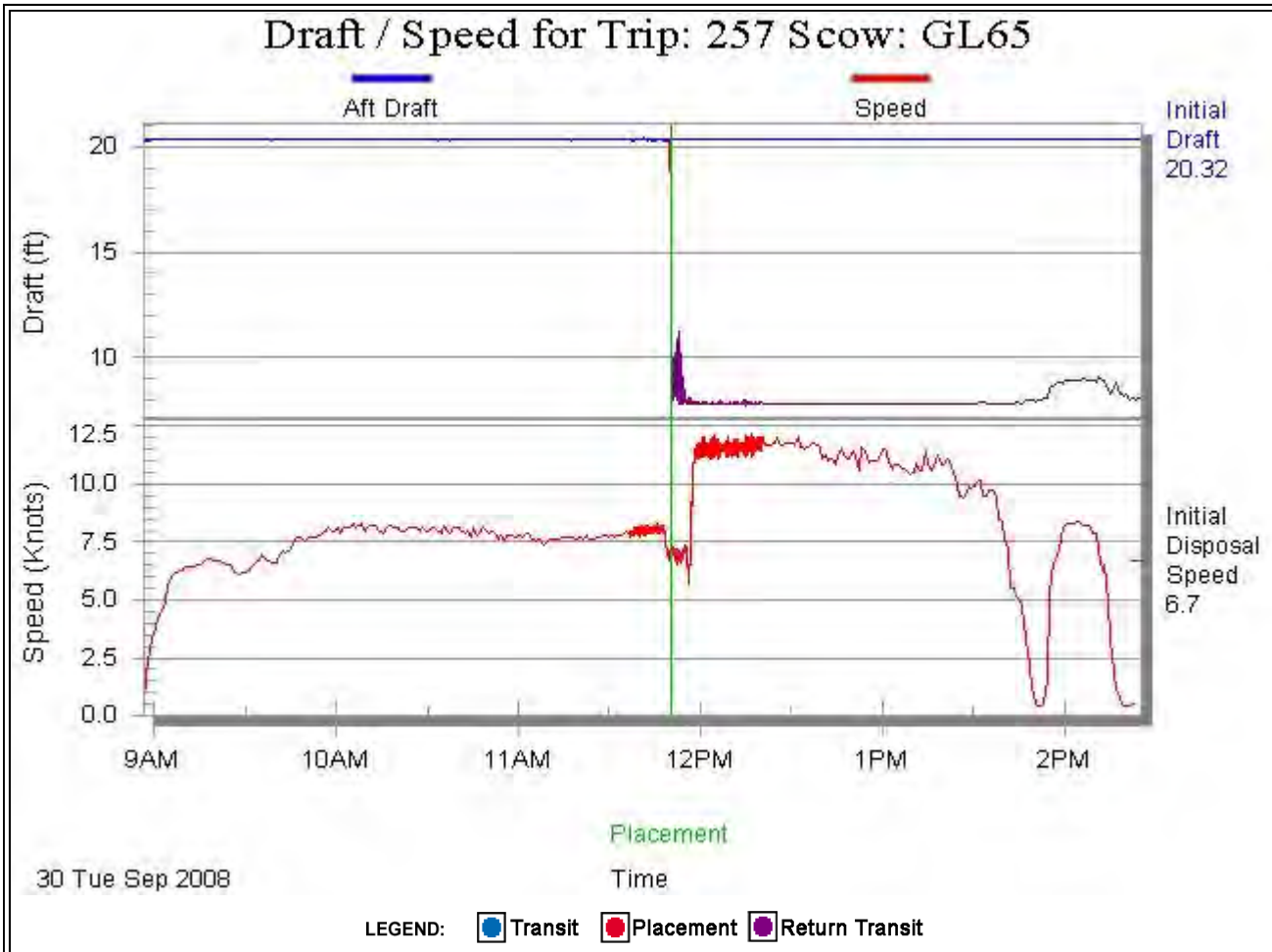

Trip Information

Trip #:	257
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 08:56:31
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/30/2008 11:50:08
Latitude:	42.428987
Longitude:	-70.582667
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/30/2008 11:50:20
Latitude:	42.429023
Longitude:	-70.582130
Aft Draft:	9.10 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_162839

2008 Boston Harbor Maintenance Dredging
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Trip Information:

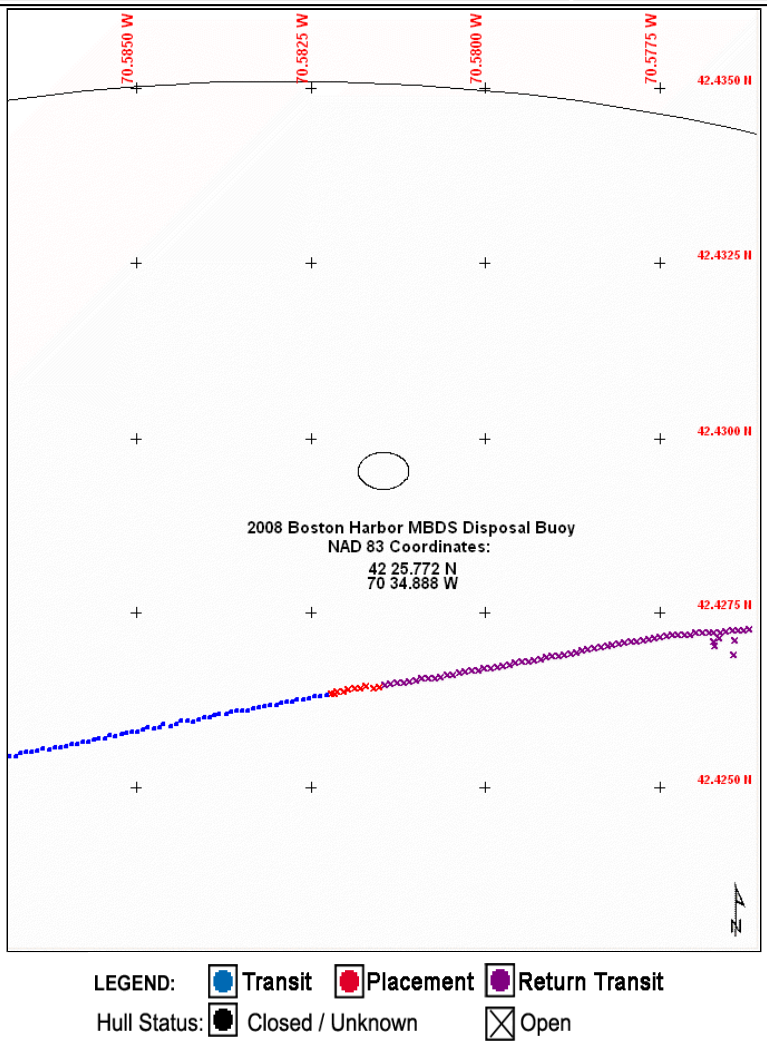
Trip #:	258
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 14:47:23
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/30/2008 17:32:41	**Time:**	9/30/2008 17:32:57
Lat:	42.426342	**Lat:**	42.426434
Long:	-70.582212	**Long:**	-70.581525
Aft Draft:	18.53 ft	**Aft Draft:**	12.58 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/30/2008 2:40:00 PM (Local)
Wave Height: 3.6 ft **Dominant Wave Period:** 14.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The gaps in return tranist data between 9:42 PM and 9:50 PM (GMT) on 9/30/08 are due to the ADISS tracking system on-board the GL63 losing GPS signal. SAIC will continue to monitor for problems.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_163540

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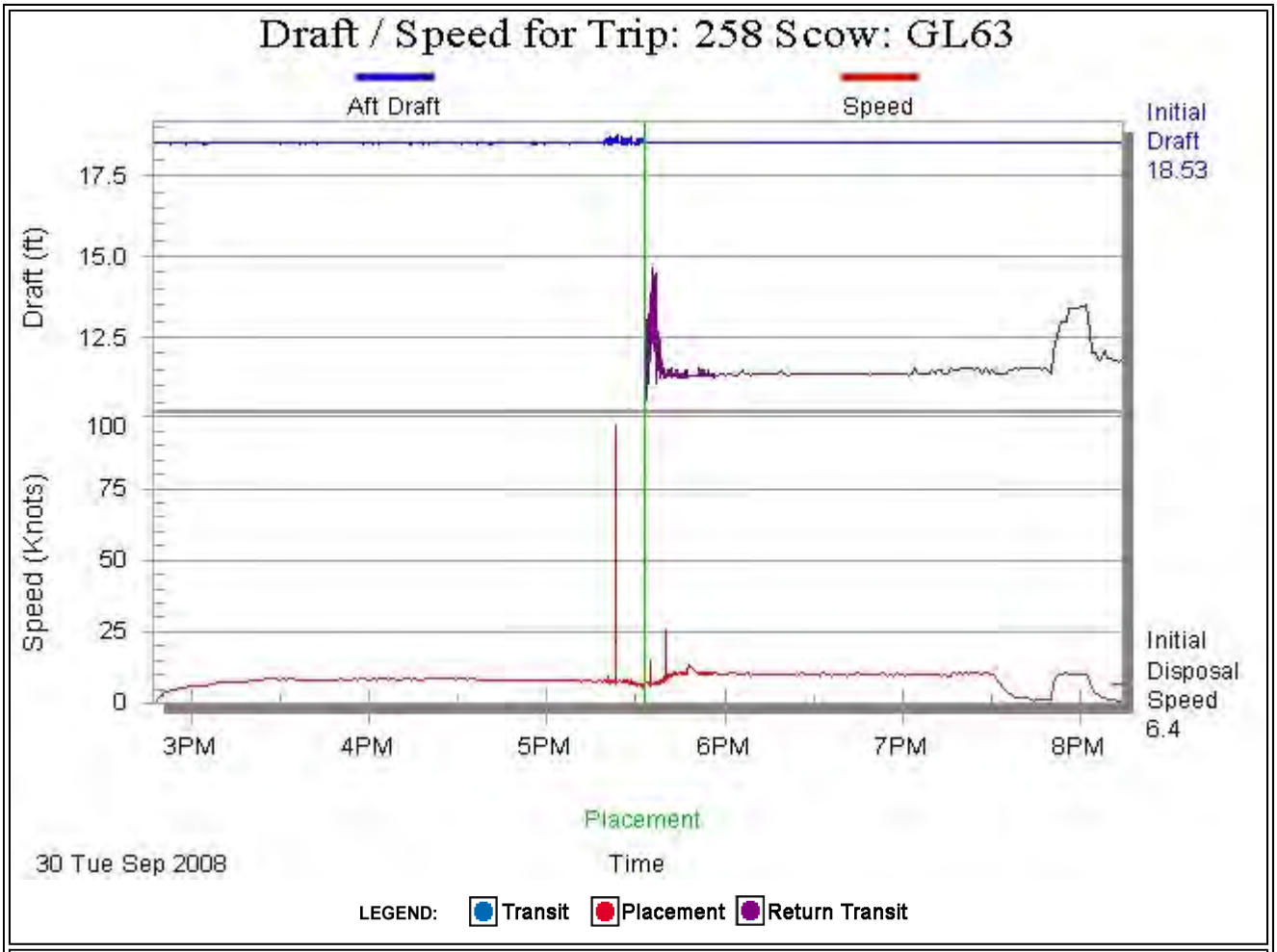

Trip Information

Trip #:	258
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 14:47:23
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/30/2008 17:32:41
Latitude:	42.426342
Longitude:	-70.582212
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/30/2008 17:32:57
Latitude:	42.426434
Longitude:	-70.581525
Aft Draft:	12.58 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The gaps in return tranist data between 9:42 PM and 9:50 PM (GMT) on 9/30/08 are due to the ADISS tracking system on-board the GL63 losing GPS signal. SAIC will continue to monitor for problems.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_163540

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Trip Information:

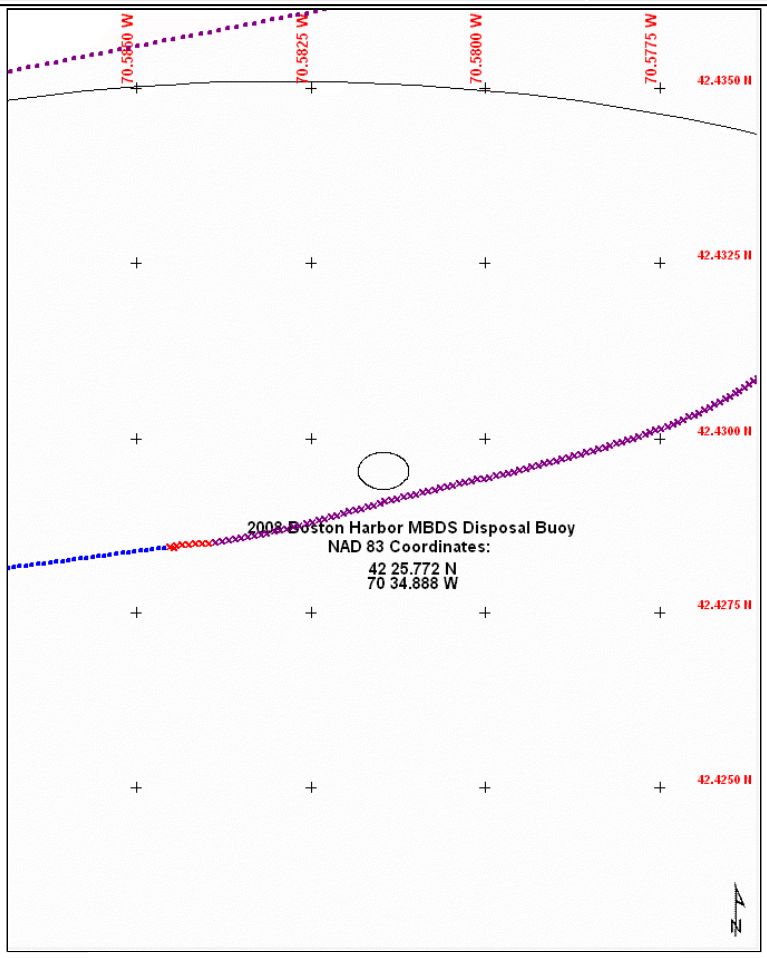
Trip #:	259
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 20:46:06
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	9/30/2008 23:36:54	**Time:**	9/30/2008 23:37:06
Lat:	42.428438	**Lat:**	42.428491
Long:	-70.584516	**Long:**	-70.583967
Aft Draft:	20.32 ft	**Aft Draft:**	8.22 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 9/30/2008 8:13:00 PM (Local)
Wave Height: 3.9 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_163815

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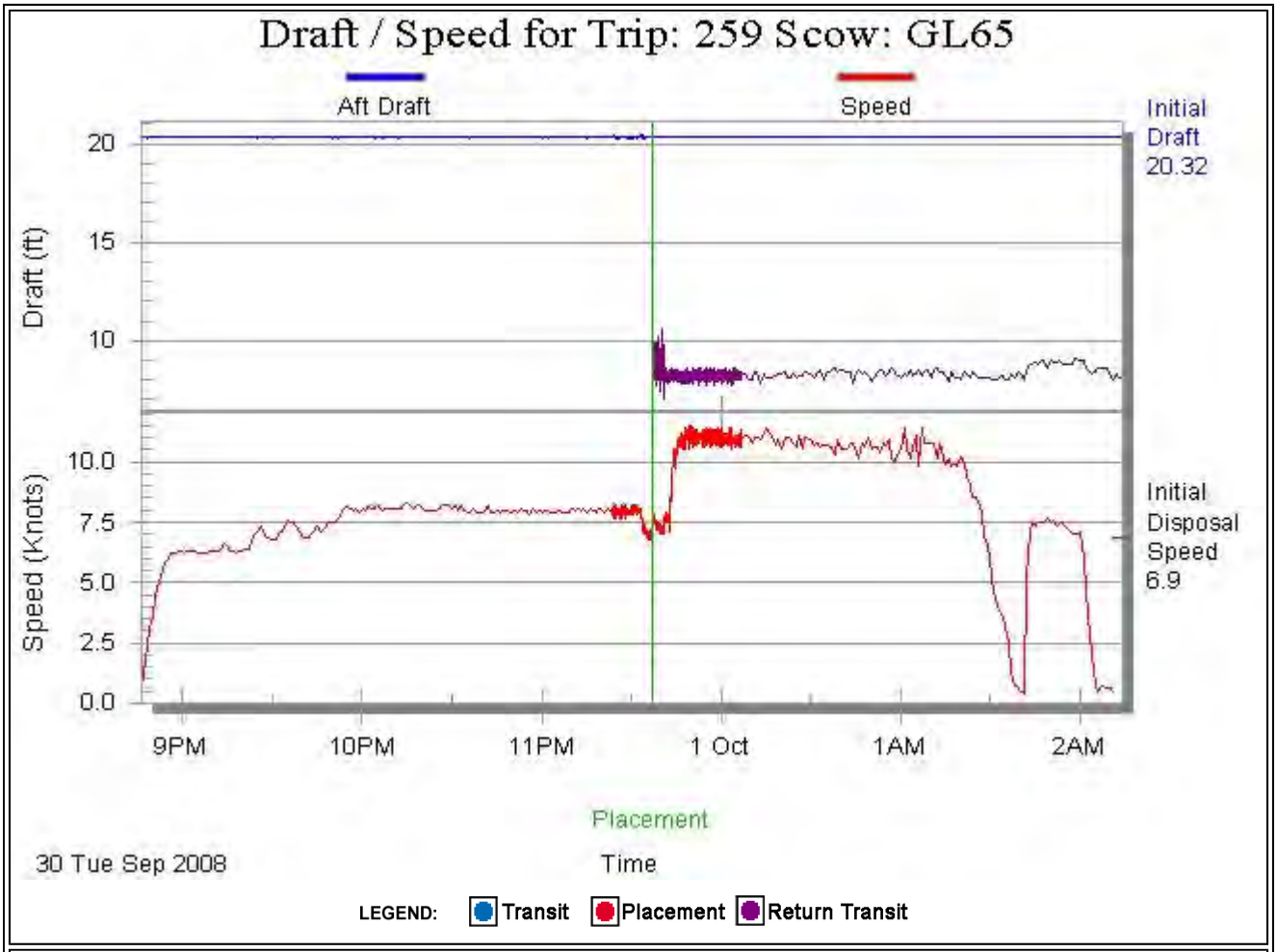

Trip Information

Trip #:	259
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	9/30/2008 20:46:06
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	9/30/2008 23:36:54
Latitude:	42.428438
Longitude:	-70.584516
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	9/30/2008 23:37:06
Latitude:	42.428491
Longitude:	-70.583967
Aft Draft:	8.22 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_163815

2008 Boston Harbor Maintenance Dredging
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Trip Information:

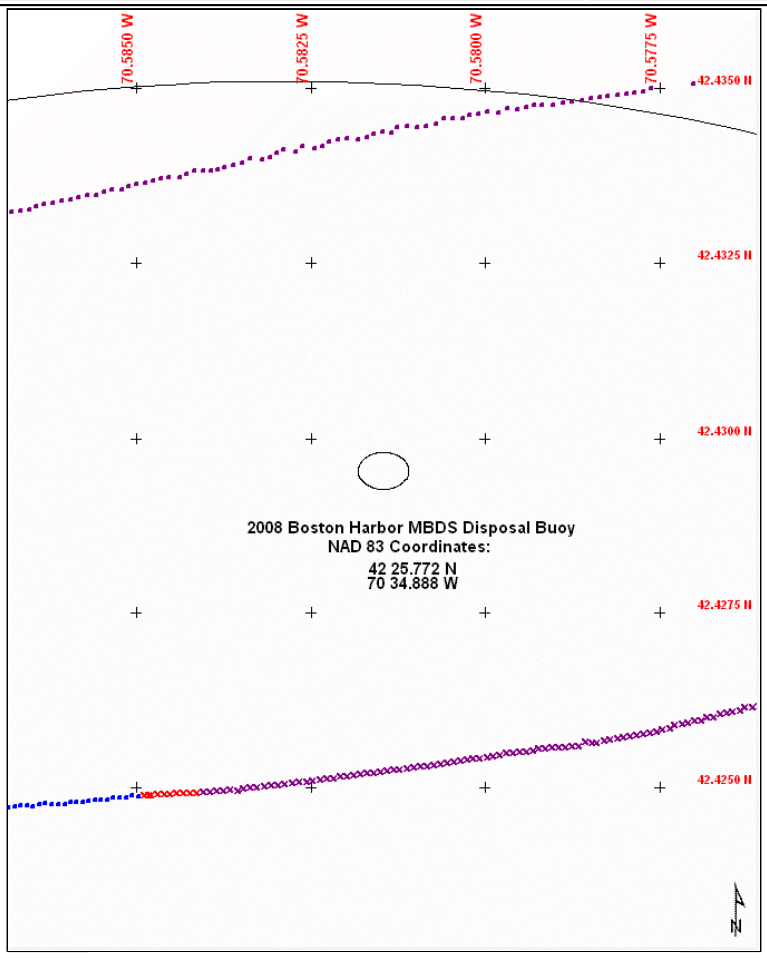
Trip #:	260
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/1/2008 02:34:59
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/1/2008 05:14:47	**Time:**	10/1/2008 05:15:03
Lat:	42.424887	**Lat:**	42.424912
Long:	-70.584882	**Long:**	-70.584134
Aft Draft:	18.53 ft	**Aft Draft:**	12.66 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/1/2008 2:33:00 AM (Local)
Wave Height: 4.9 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_164113

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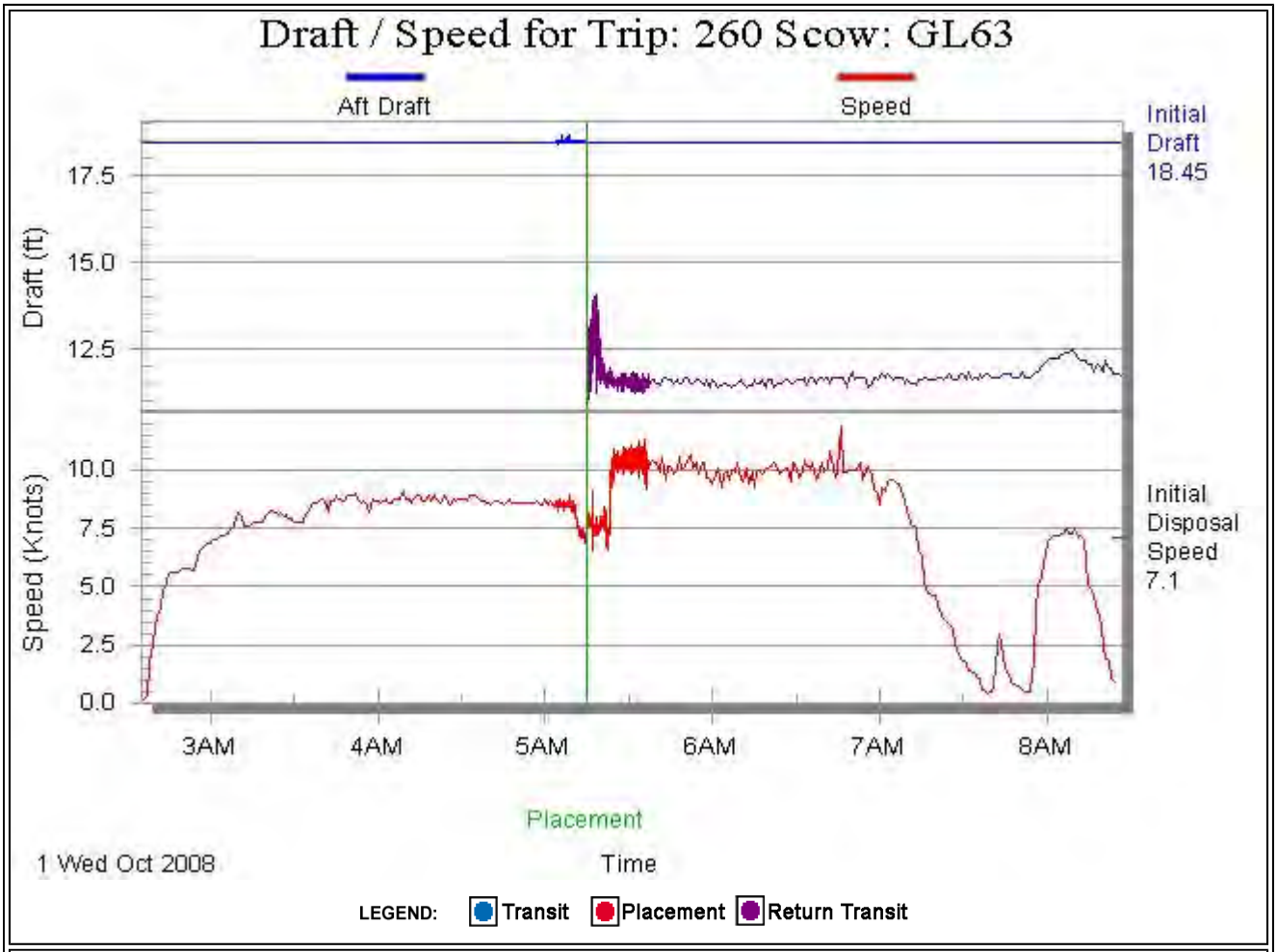

Trip Information

Trip #:	260
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/1/2008 02:34:59
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/1/2008 05:14:47
Latitude:	42.424887
Longitude:	-70.584882
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/1/2008 05:15:03
Latitude:	42.424912
Longitude:	-70.584134
Aft Draft:	12.66 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_164113

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Trip Information:

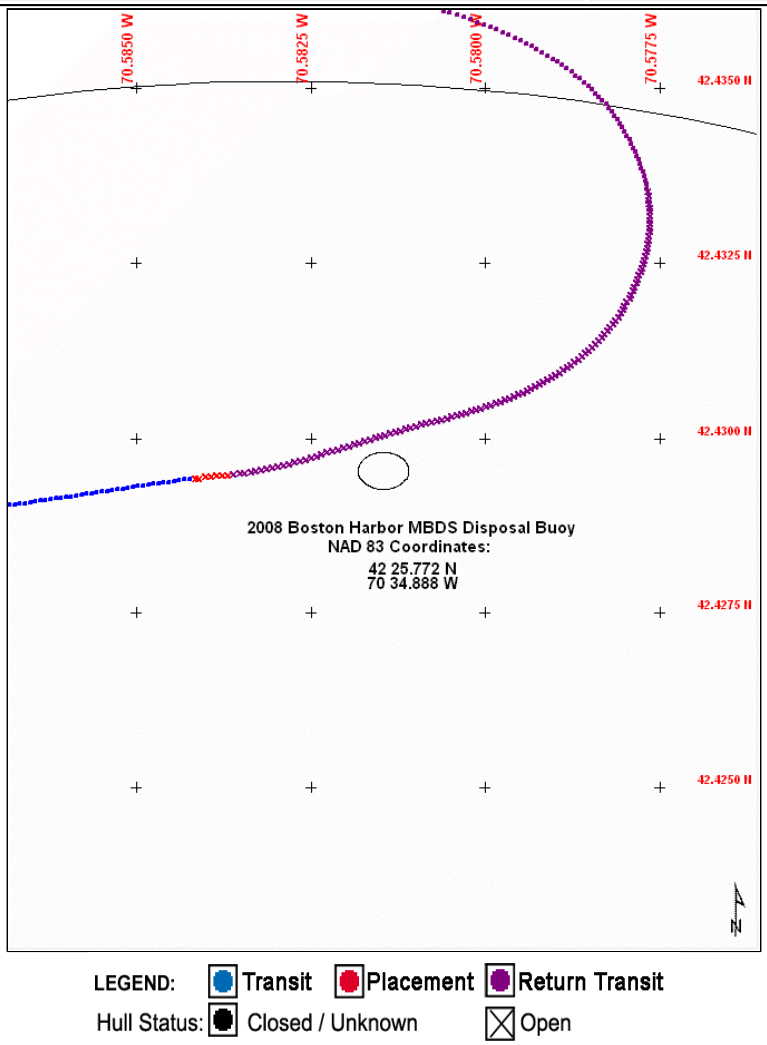
Trip #:	261
Tug:	Liberty
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/1/2008 09:08:12
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	10/1/2008 12:22:38	10/1/2008 12:22:50
Lat:	42.429421	42.429474
Long:	-70.584164	-70.583693
Aft Draft:	20.32 ft	8.88 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/1/2008 1:23:00 PM (Local)
Wave Height: 3.9 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_164639

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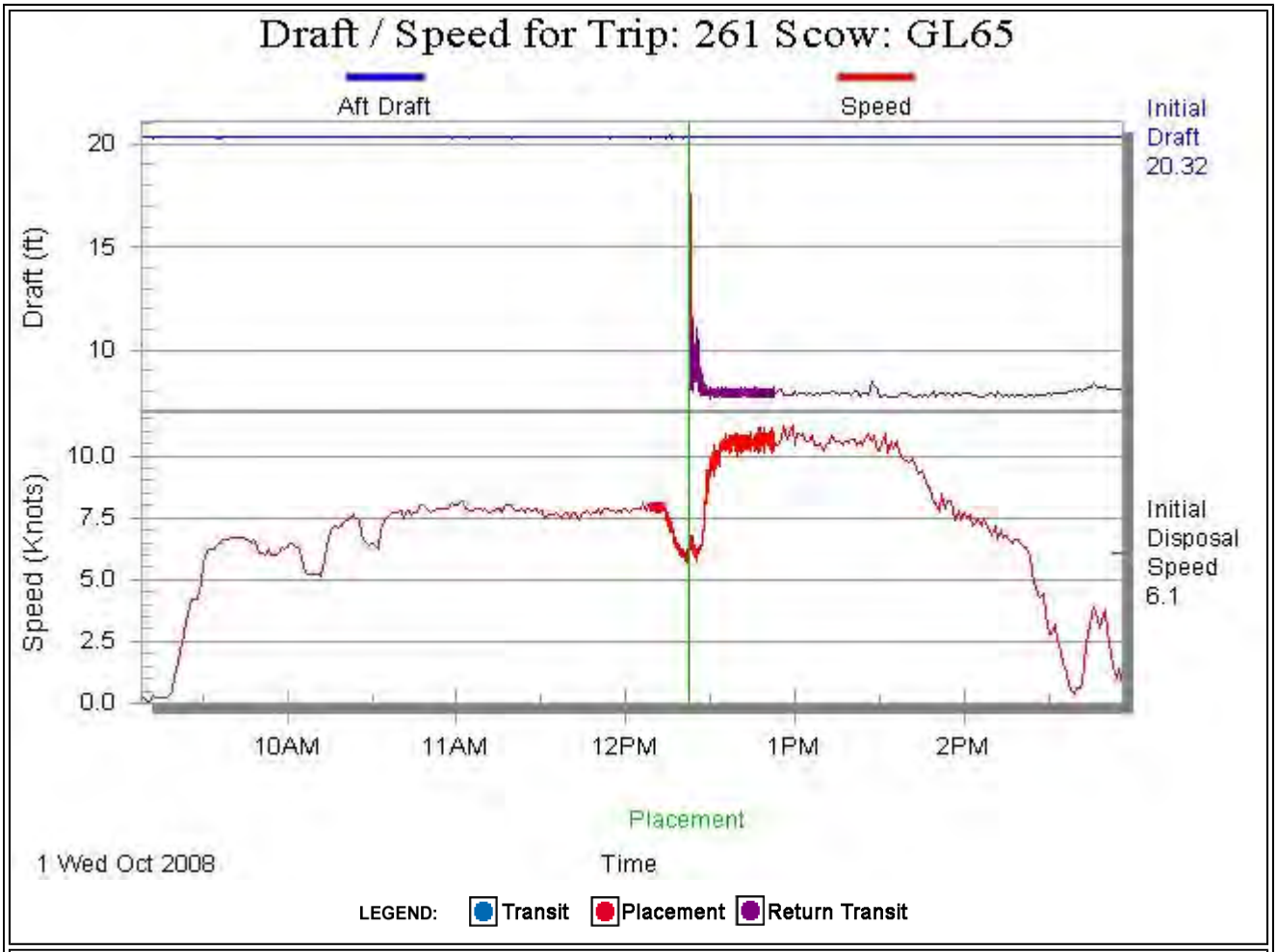

Trip Information

Trip #:	261
Tug Name:	Liberty
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/1/2008 09:08:12
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/1/2008 12:22:38
Latitude:	42.429421
Longitude:	-70.584164
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/1/2008 12:22:50
Latitude:	42.429474
Longitude:	-70.583693
Aft Draft:	8.88 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_164639

2008 Boston Harbor Maintenance Dredging
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Trip Information:

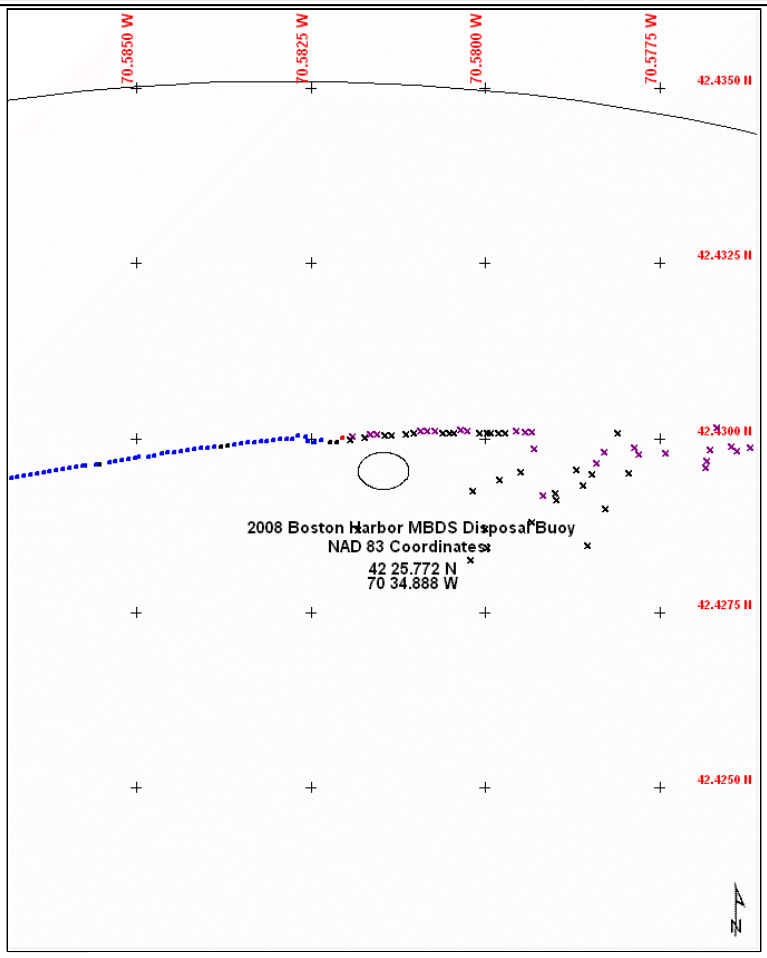
Trip #:	262
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/1/2008 20:31:27
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/1/2008 23:25:59	**Time:**	10/1/2008 23:26:17
Lat:	42.430008	**Lat:**	42.430056
Long:	-70.582063	**Long:**	-70.581139
Aft Draft:	18.45 ft	**Aft Draft:**	12.42 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/1/2008 8:23:00 PM (Local)
Wave Height: 3.6 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_164956

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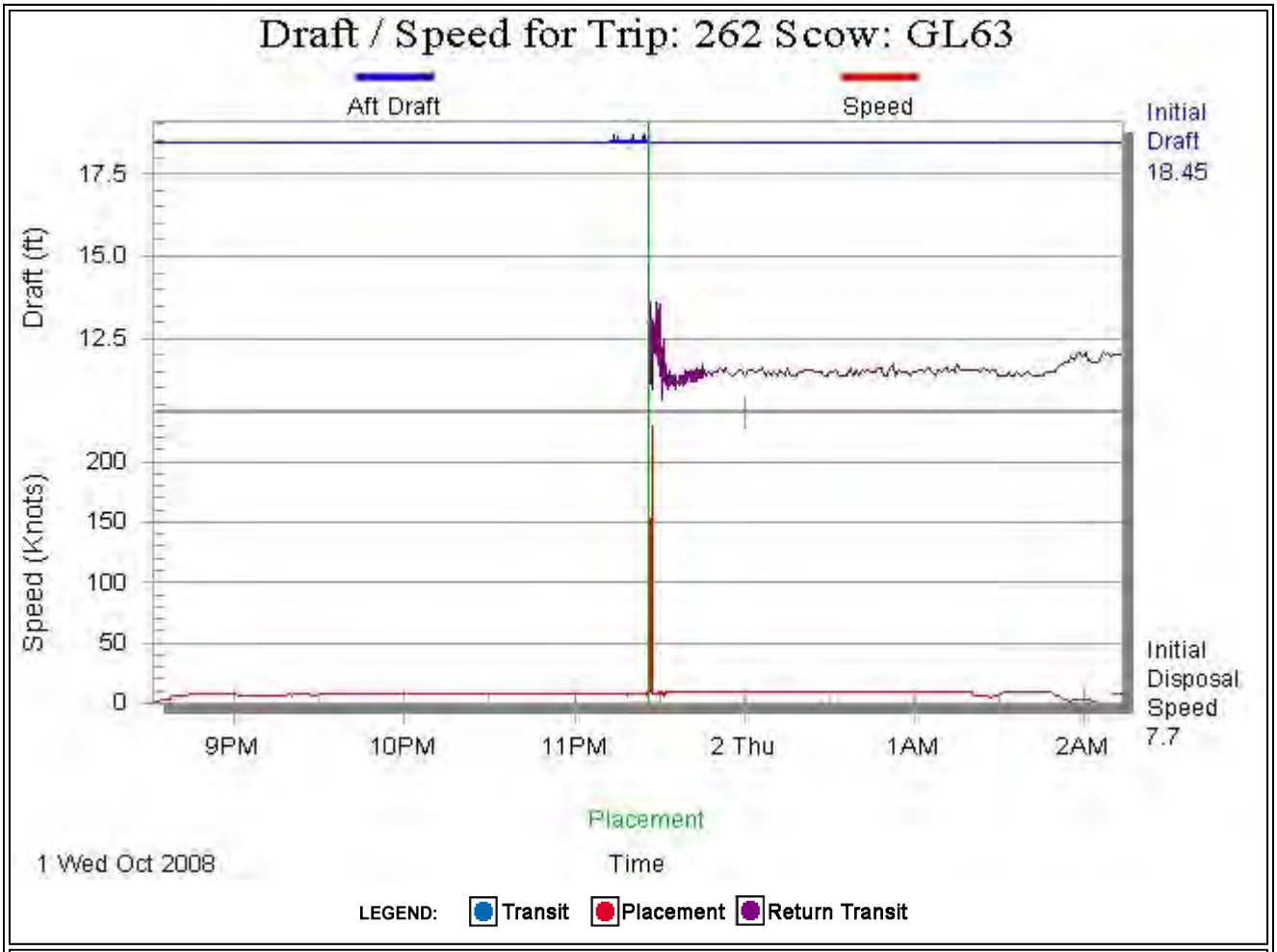

Trip Information

Trip #:	262
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/1/2008 20:31:27
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/1/2008 23:25:59
Latitude:	42.430008
Longitude:	-70.582063
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/1/2008 23:26:17
Latitude:	42.430056
Longitude:	-70.581139
Aft Draft:	12.42 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_164956

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Trip Information:

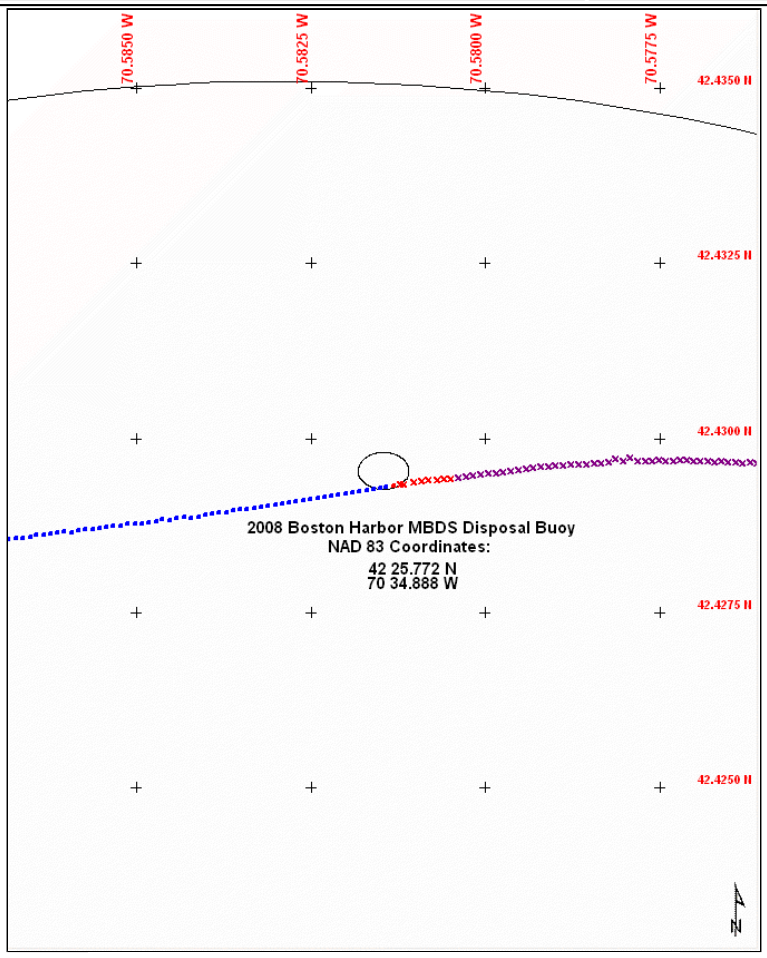
Trip #:	263
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 02:30:46
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/2/2008 05:14:38	**Time:**	10/2/2008 05:14:54
Lat:	42.429302	**Lat:**	42.429418
Long:	-70.581312	**Long:**	-70.580487
Aft Draft:	20.32 ft	**Aft Draft:**	8.36 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/2/2008 2:22:00 AM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_165700

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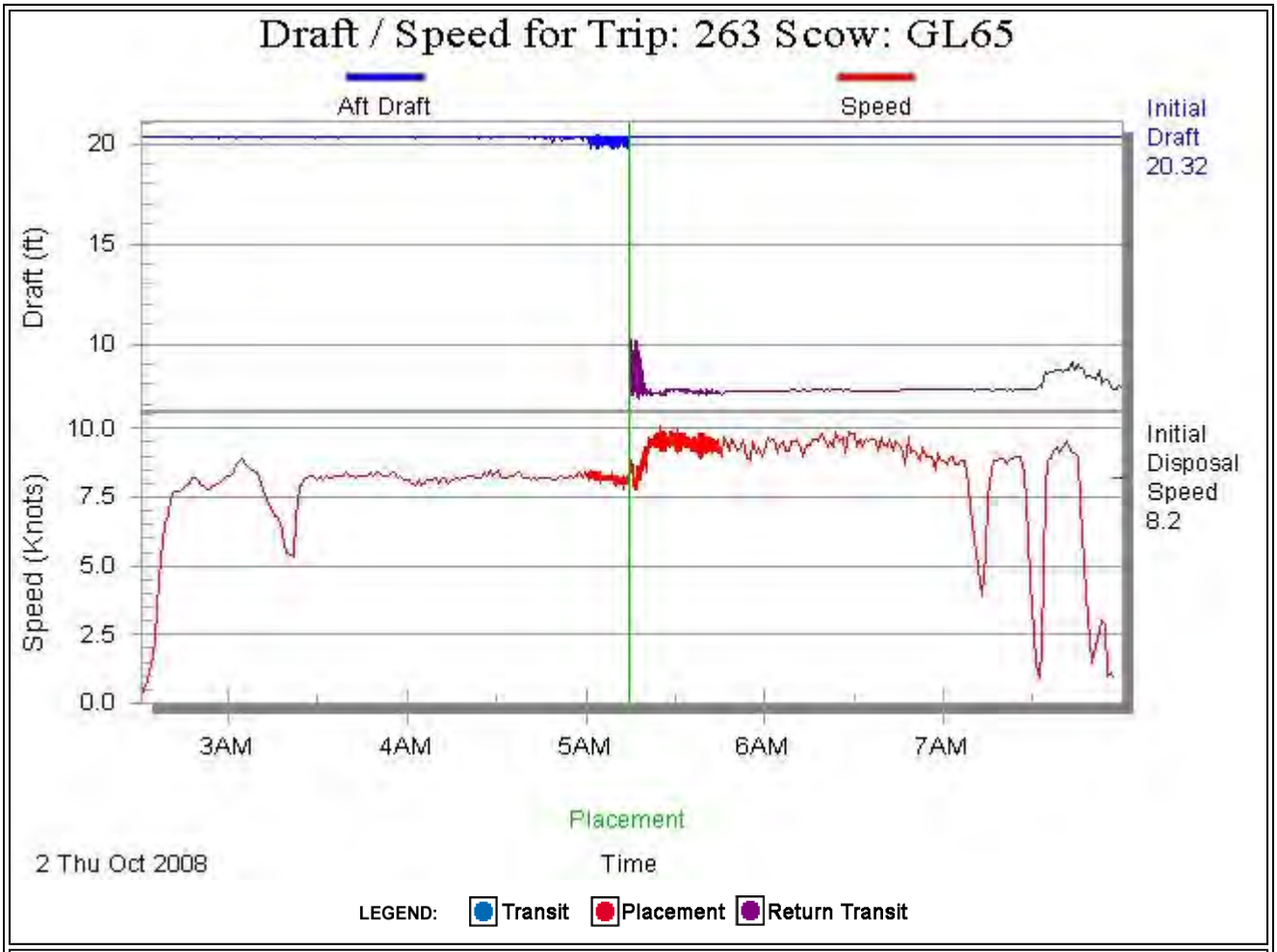

Trip Information

Trip #:	263
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 02:30:46
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/2/2008 05:14:38
Latitude:	42.429302
Longitude:	-70.581312
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/2/2008 05:14:54
Latitude:	42.429418
Longitude:	-70.580487
Aft Draft:	8.36 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_165700

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W912WJ-07-C-0023

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Trip Information:

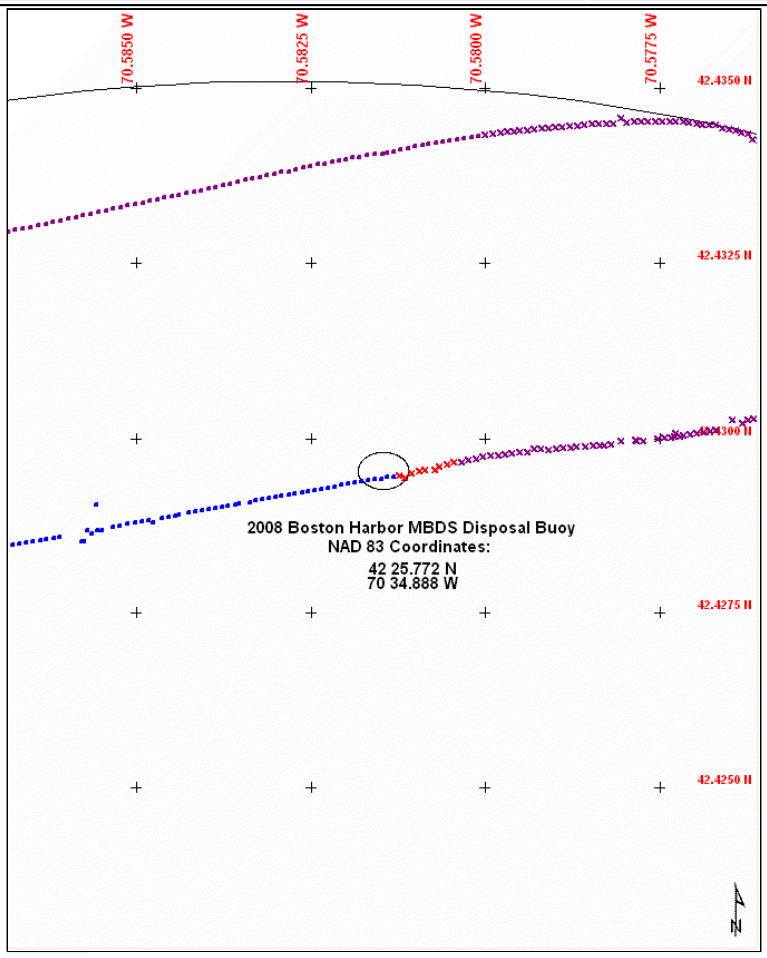
Trip #:	264
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 08:17:18
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/2/2008 11:09:33	**Time:**	10/2/2008 11:09:49
Lat:	42.429467	**Lat:**	42.429655
Long:	-70.581228	**Long:**	-70.580447
Aft Draft:	18.53 ft	**Aft Draft:**	12.42 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/2/2008 8:16:00 AM (Local)
Wave Height: 3.3 ft **Dominant Wave Period:** 11.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100208_170245

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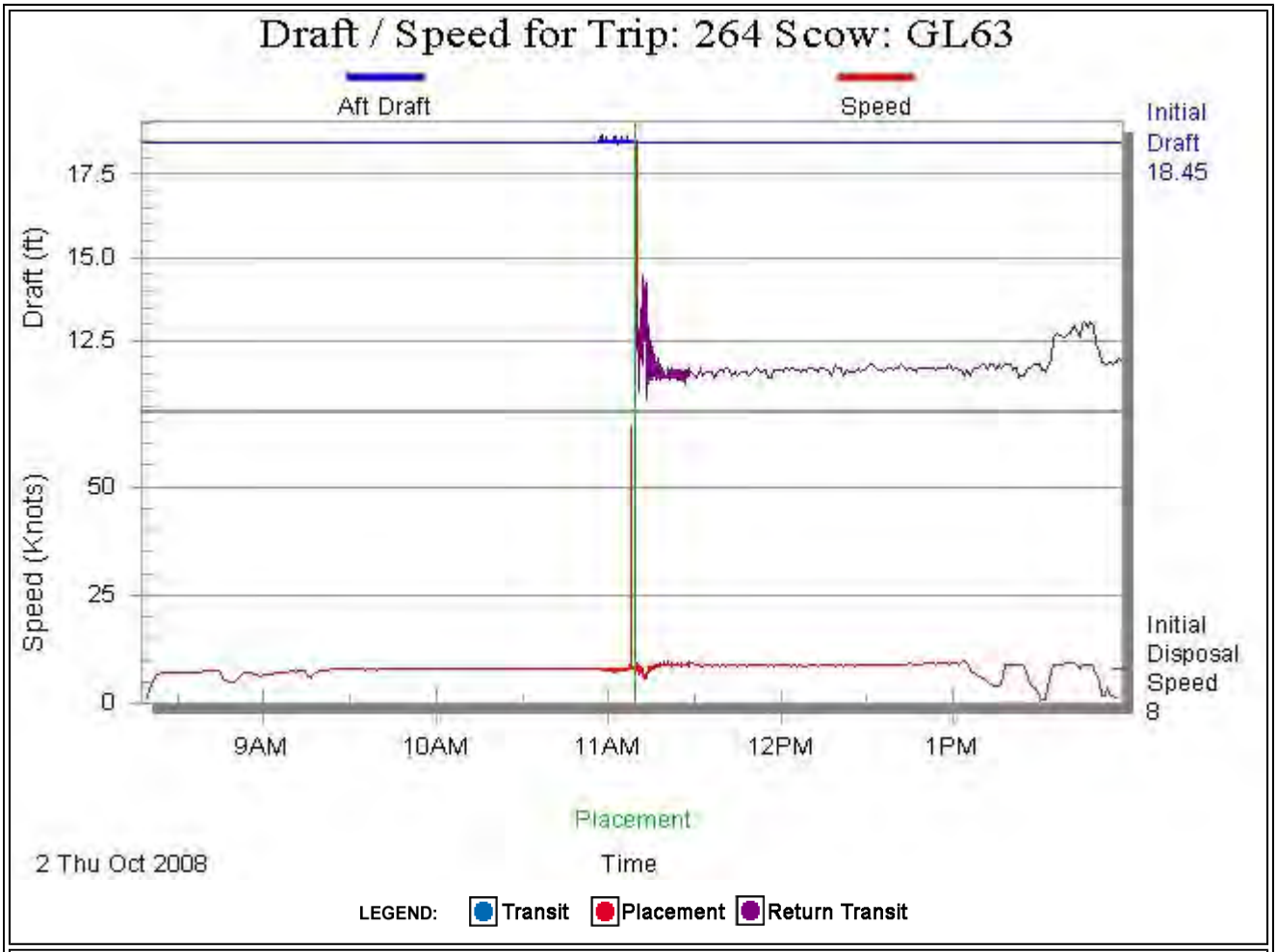

Trip Information

Trip #:	264
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 08:17:18
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/2/2008 11:09:33
Latitude:	42.429467
Longitude:	-70.581228
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/2/2008 11:09:49
Latitude:	42.429655
Longitude:	-70.580447
Aft Draft:	12.42 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100208_170245

2008 Boston Harbor Maintenance Dredging
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Trip Information:

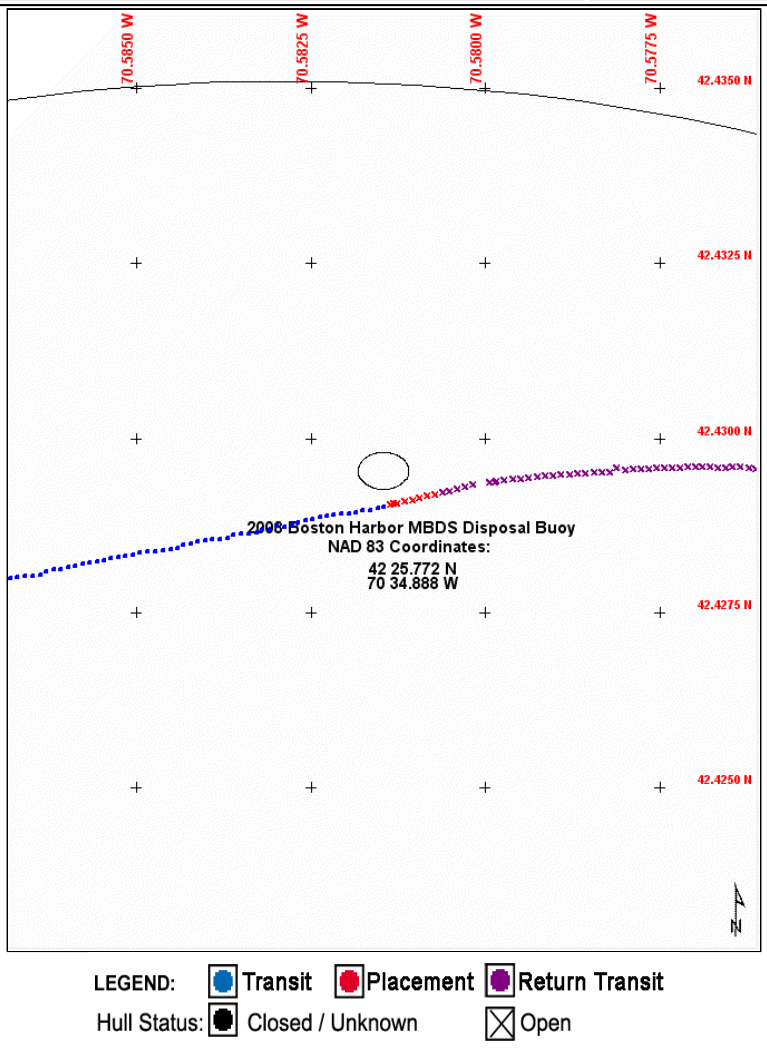
Trip #:	265
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 14:22:50
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/2/2008 17:00:09	**Time:**	10/2/2008 17:00:21
Lat:	42.429041	**Lat:**	42.429187
Long:	-70.581355	**Long:**	-70.580725
Aft Draft:	20.32 ft	**Aft Draft:**	8.36 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/2/2008 2:16:00 PM (Local)
Wave Height: 3.9 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100308_105833

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W912WJ-07-C-0023

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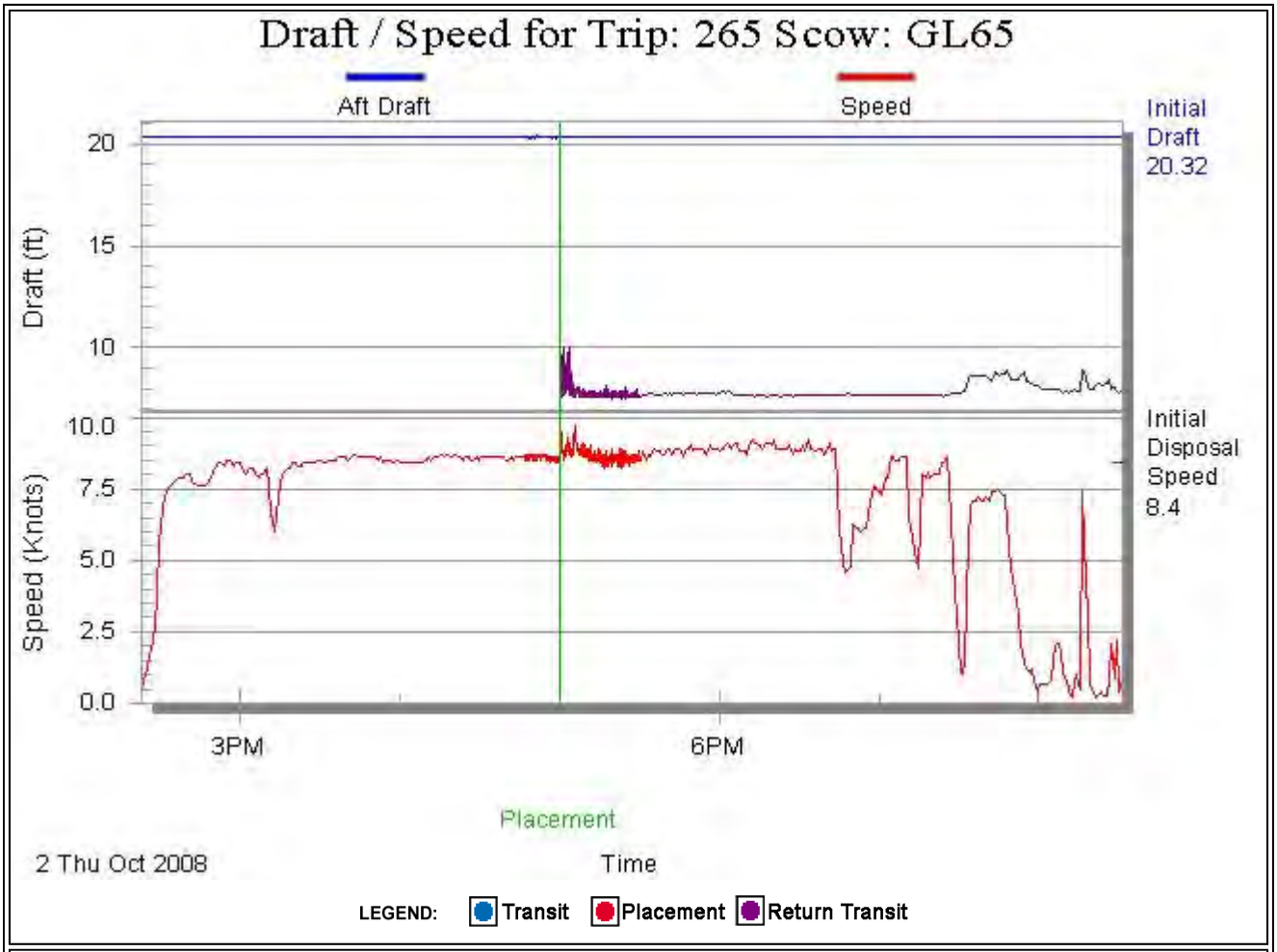

Trip Information

Trip #:	265
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 14:22:50
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/2/2008 17:00:09
Latitude:	42.429041
Longitude:	-70.581355
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/2/2008 17:00:21
Latitude:	42.429187
Longitude:	-70.580725
Aft Draft:	8.36 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100308_105833

2008 Boston Harbor Maintenance Dredging
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Trip Information:

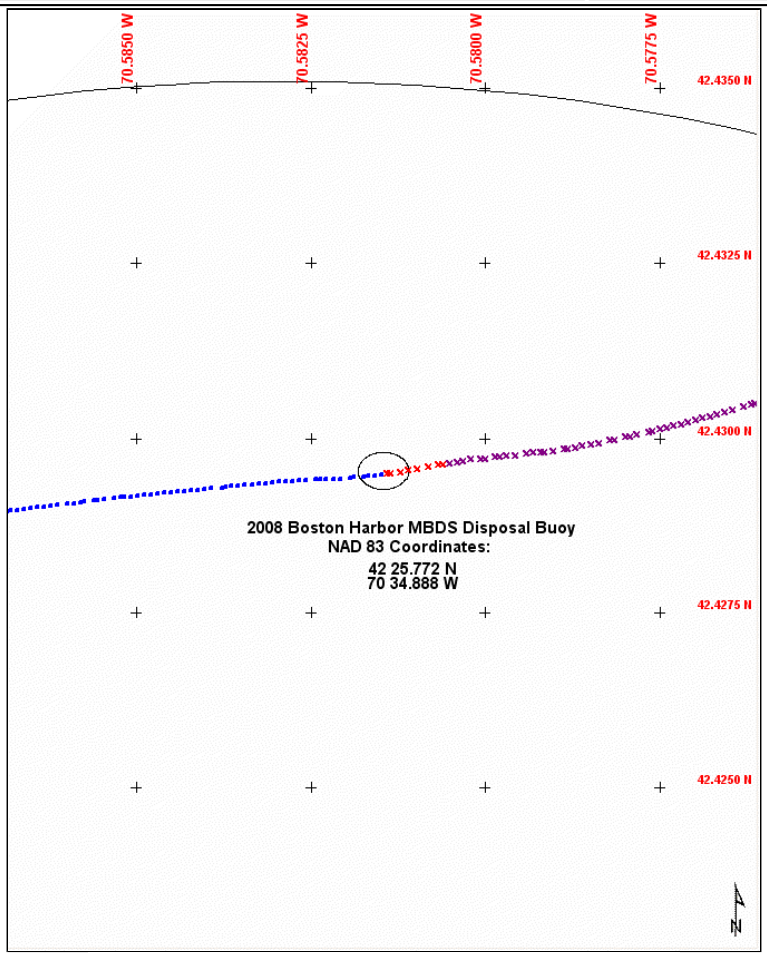
Trip #:	266
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 20:55:41
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/2/2008 23:43:38	**Time:**	10/2/2008 23:43:54
Lat:	42.429493	**Lat:**	42.429627
Long:	-70.581400	**Long:**	-70.580612
Aft Draft:	18.45 ft	**Aft Draft:**	12.18 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/2/2008 8:48:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100308_105854

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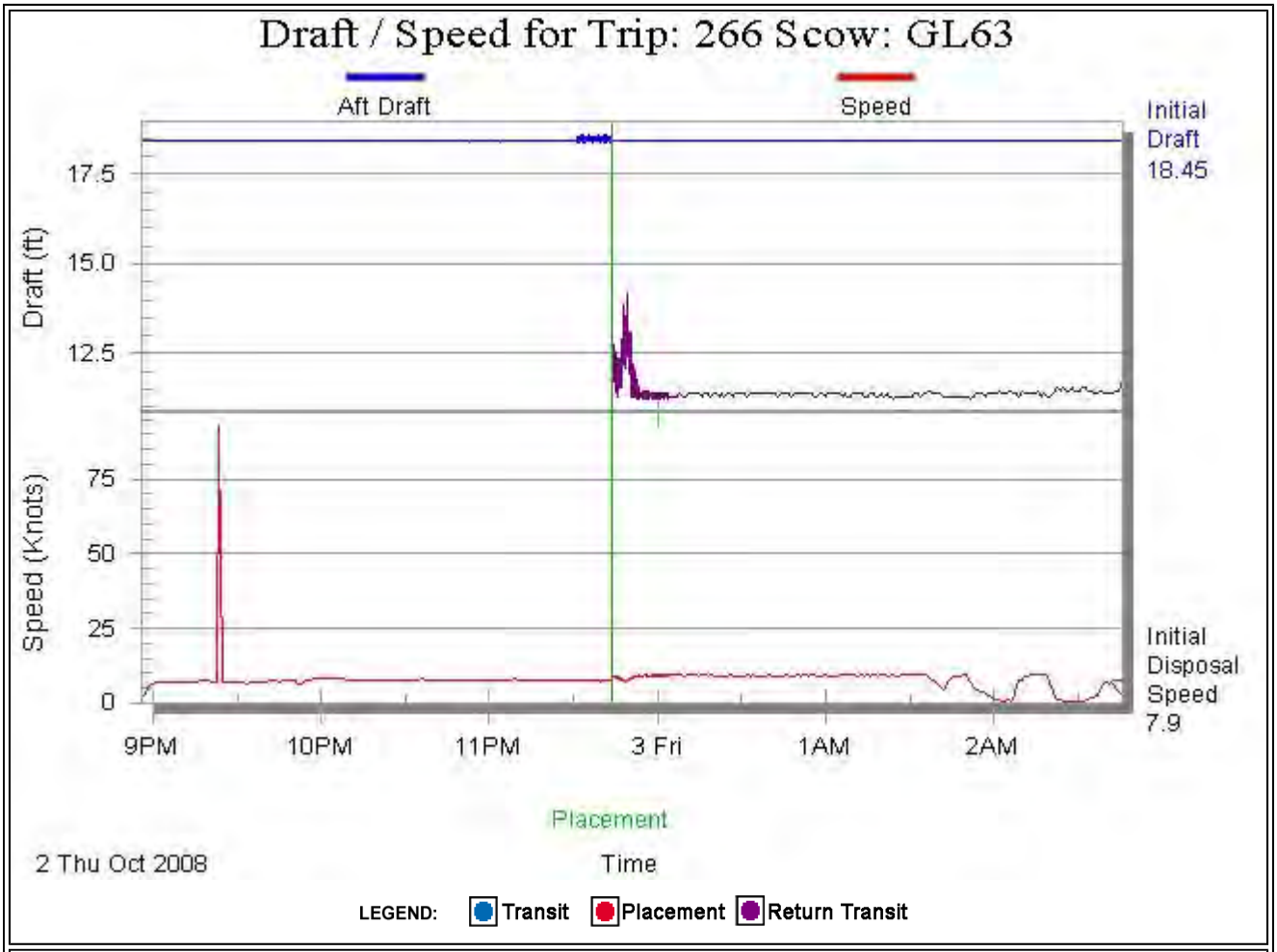

Trip Information

Trip #:	266
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/2/2008 20:55:41
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/2/2008 23:43:38
Latitude:	42.429493
Longitude:	-70.581400
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/2/2008 23:43:54
Latitude:	42.429627
Longitude:	-70.580612
Aft Draft:	12.18 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100308_105854

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Trip Information:

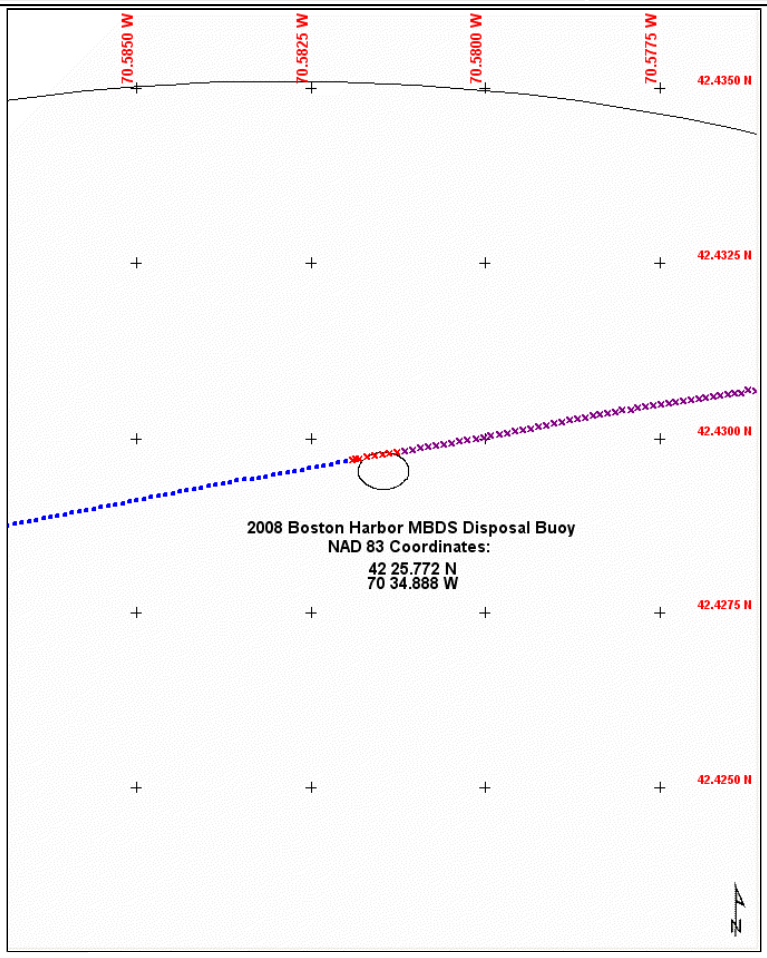
Trip #:	267
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/3/2008 03:12:27
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/3/2008 05:54:27	**Time:**	10/3/2008 05:54:39
Lat:	42.429692	**Lat:**	42.429800
Long:	-70.581916	**Long:**	-70.581259
Aft Draft:	20.25 ft	**Aft Draft:**	7.99 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/3/2008 3:21:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100308_105910

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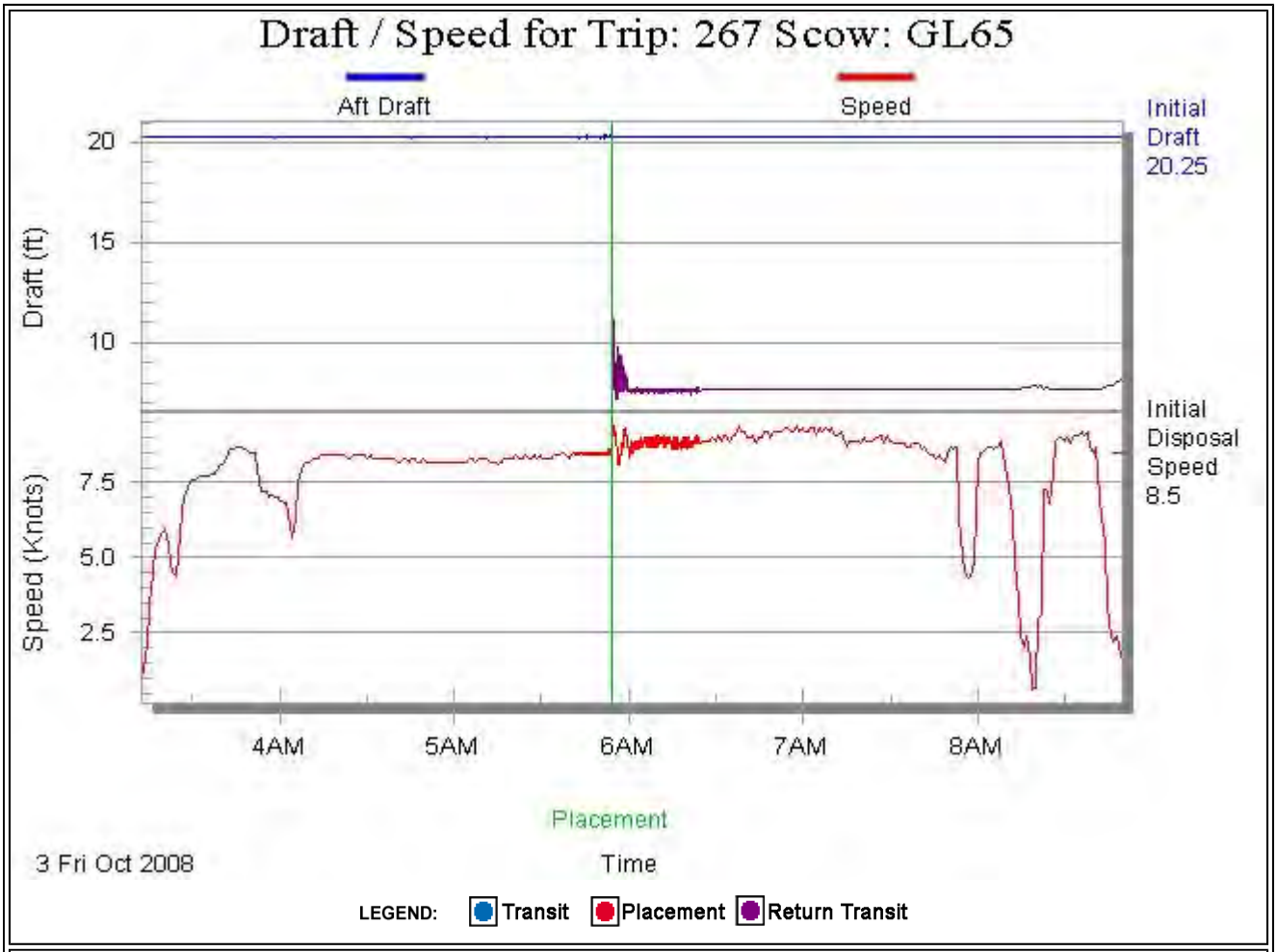

Trip Information

Trip #:	267
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/3/2008 03:12:27
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/3/2008 05:54:27
Latitude:	42.429692
Longitude:	-70.581916
Aft Draft:	20.25 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/3/2008 05:54:39
Latitude:	42.429800
Longitude:	-70.581259
Aft Draft:	7.99 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100308_105910

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Trip Information:

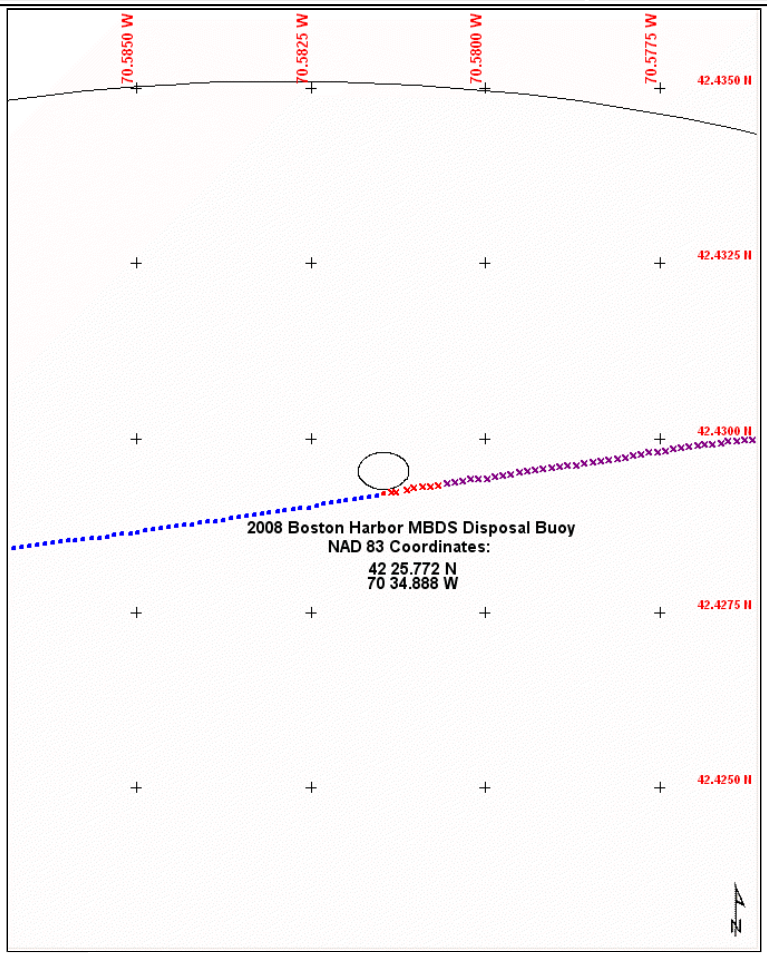
Trip #:	268
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/4/2008 02:32:11
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/4/2008 05:07:59	**Time:**	10/4/2008 05:08:13
Lat:	42.429190	**Lat:**	42.429314
Long:	-70.581454	**Long:**	-70.580665
Aft Draft:	20.25 ft	**Aft Draft:**	8.66 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/4/2008 5:05:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100708_141925

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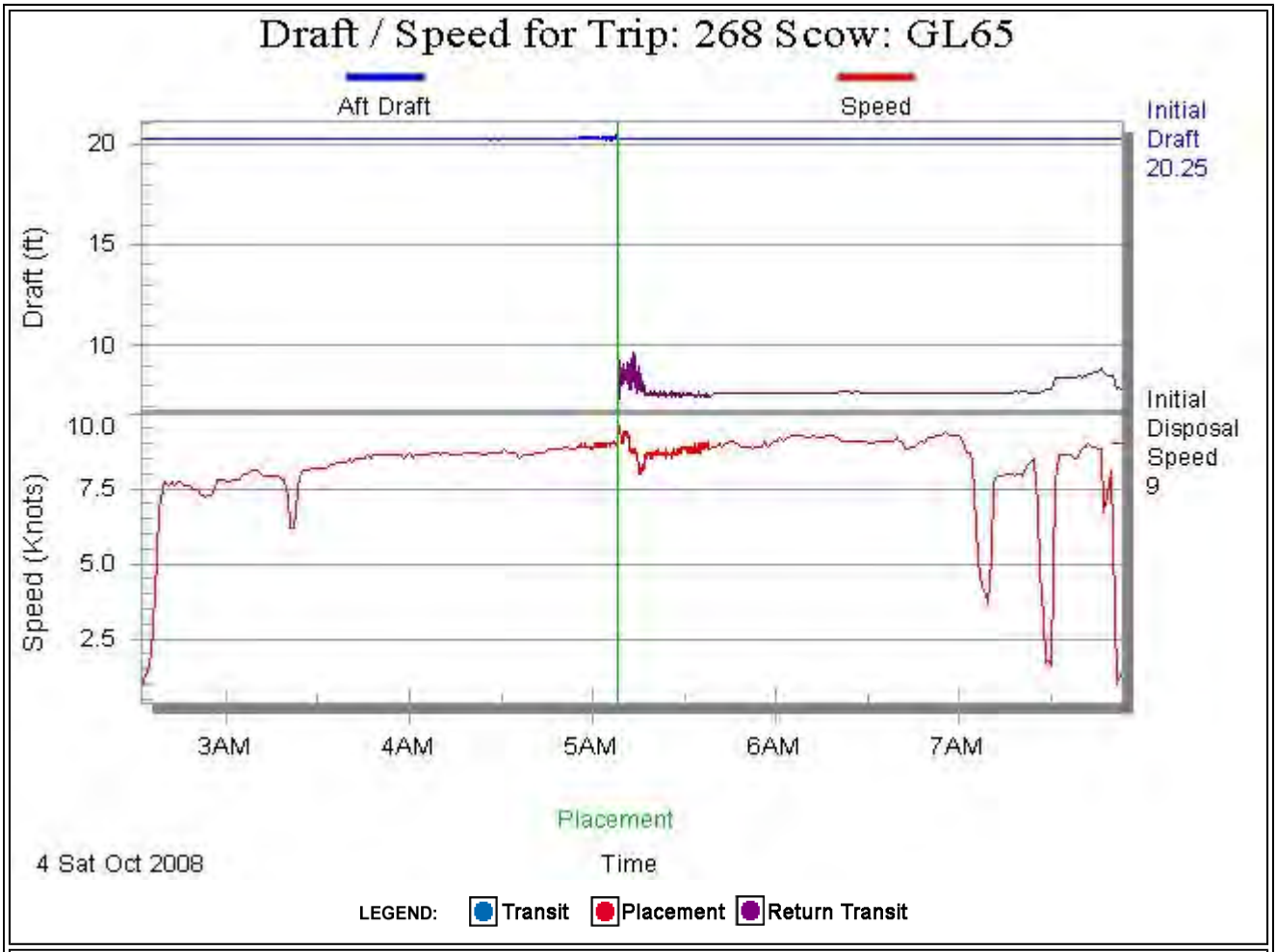

Trip Information

Trip #:	268
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/4/2008 02:32:11
Init Aft Draft:	20.25 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/4/2008 05:07:59
Latitude:	42.429190
Longitude:	-70.581454
Aft Draft:	20.25 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/4/2008 05:08:13
Latitude:	42.429314
Longitude:	-70.580665
Aft Draft:	8.66 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100708_141925

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

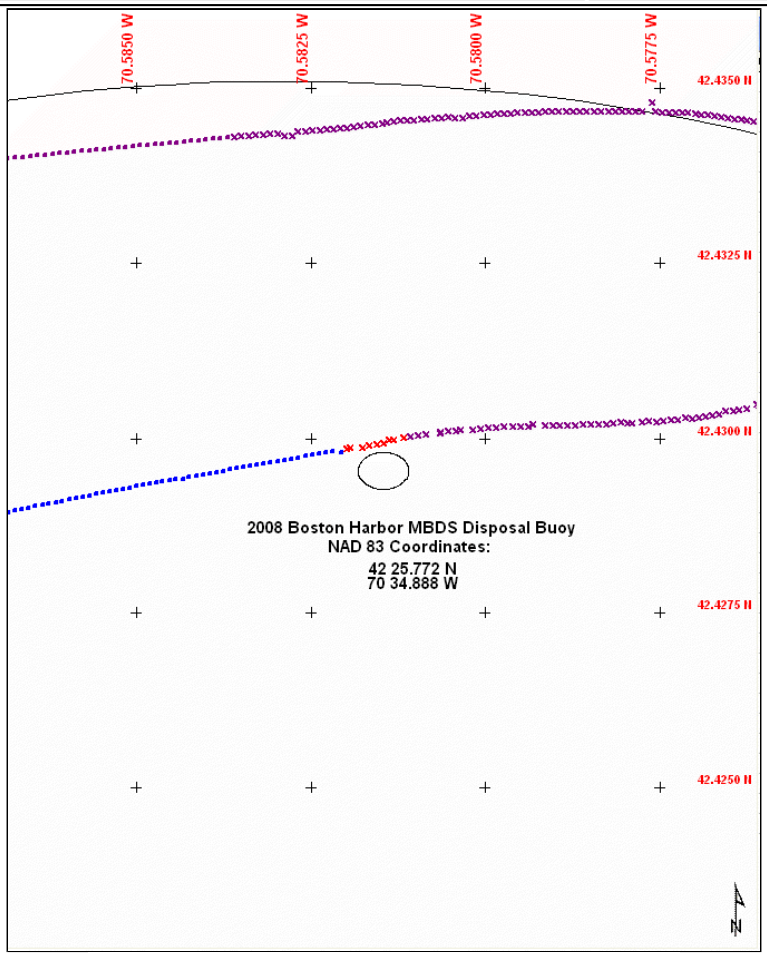
Trip #:	269
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/4/2008 07:50:22
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/4/2008 10:51:50	**Time:**	10/4/2008 10:52:06
Lat:	42.429851	**Lat:**	42.430006
Long:	-70.581992	**Long:**	-70.581171
Aft Draft:	18.45 ft	**Aft Draft:**	12.82 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/4/2008 7:59:00 AM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100608_193203

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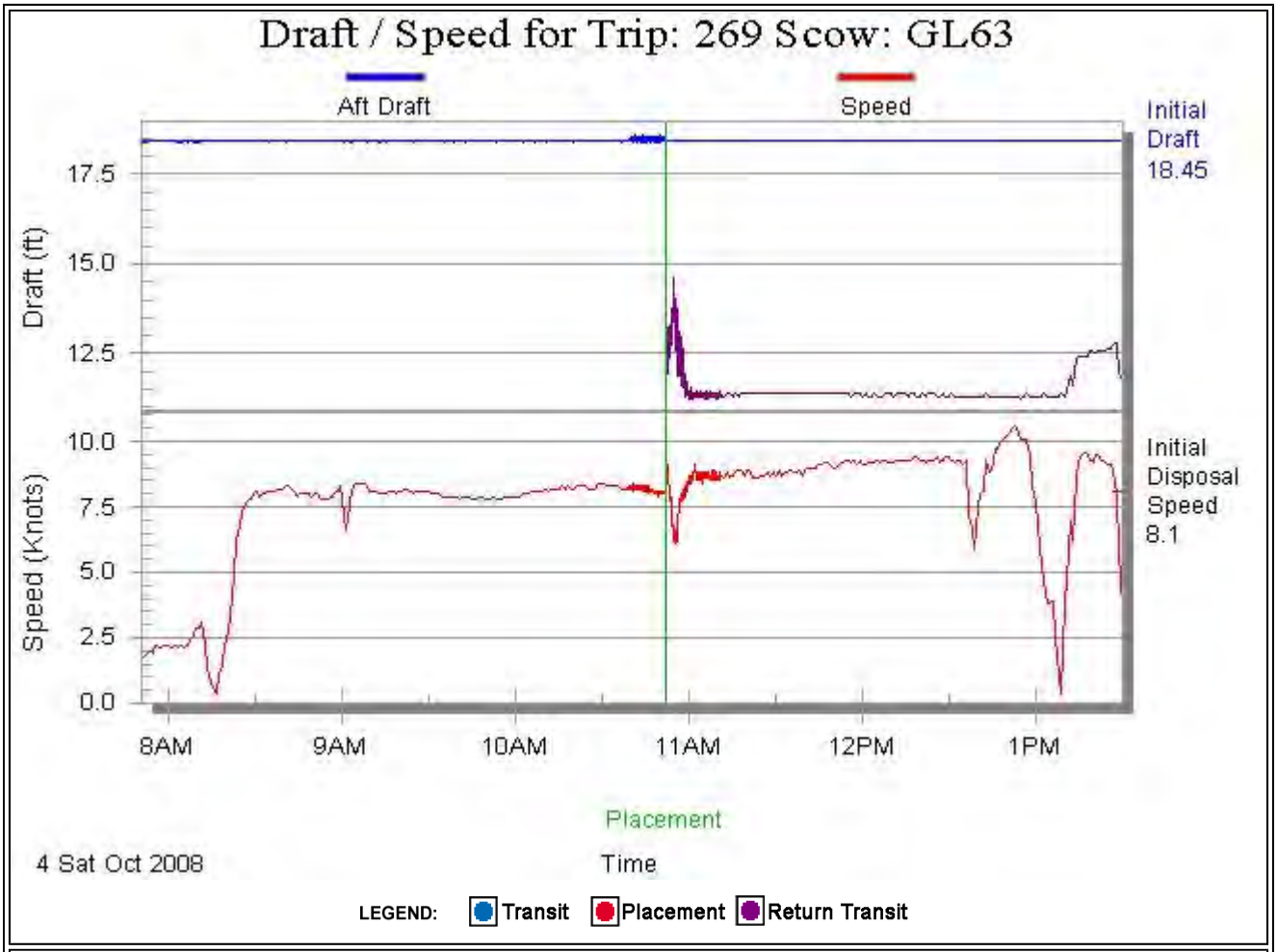

Trip Information

Trip #:	269
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/4/2008 07:50:22
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/4/2008 10:51:50
Latitude:	42.429851
Longitude:	-70.581992
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/4/2008 10:52:06
Latitude:	42.430006
Longitude:	-70.581171
Aft Draft:	12.82 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100608_193203

2008 Boston Harbor Maintenance Dredging
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Trip Information:

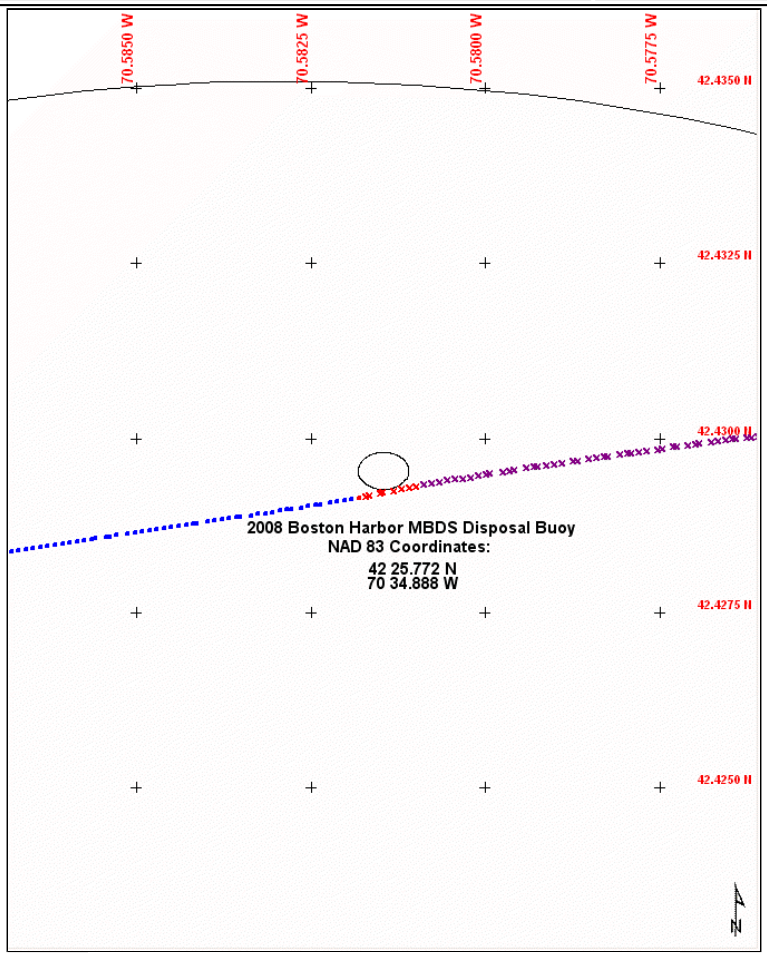
Trip #:	270
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	10/4/2008 18:03:17
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/4/2008 20:39:01	**Time:**	10/4/2008 20:39:17
Lat:	42.429137	**Lat:**	42.429298
Long:	-70.581825	**Long:**	-70.580983
Aft Draft:	20.32 ft	**Aft Draft:**	7.70 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: N/A (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100708_141902

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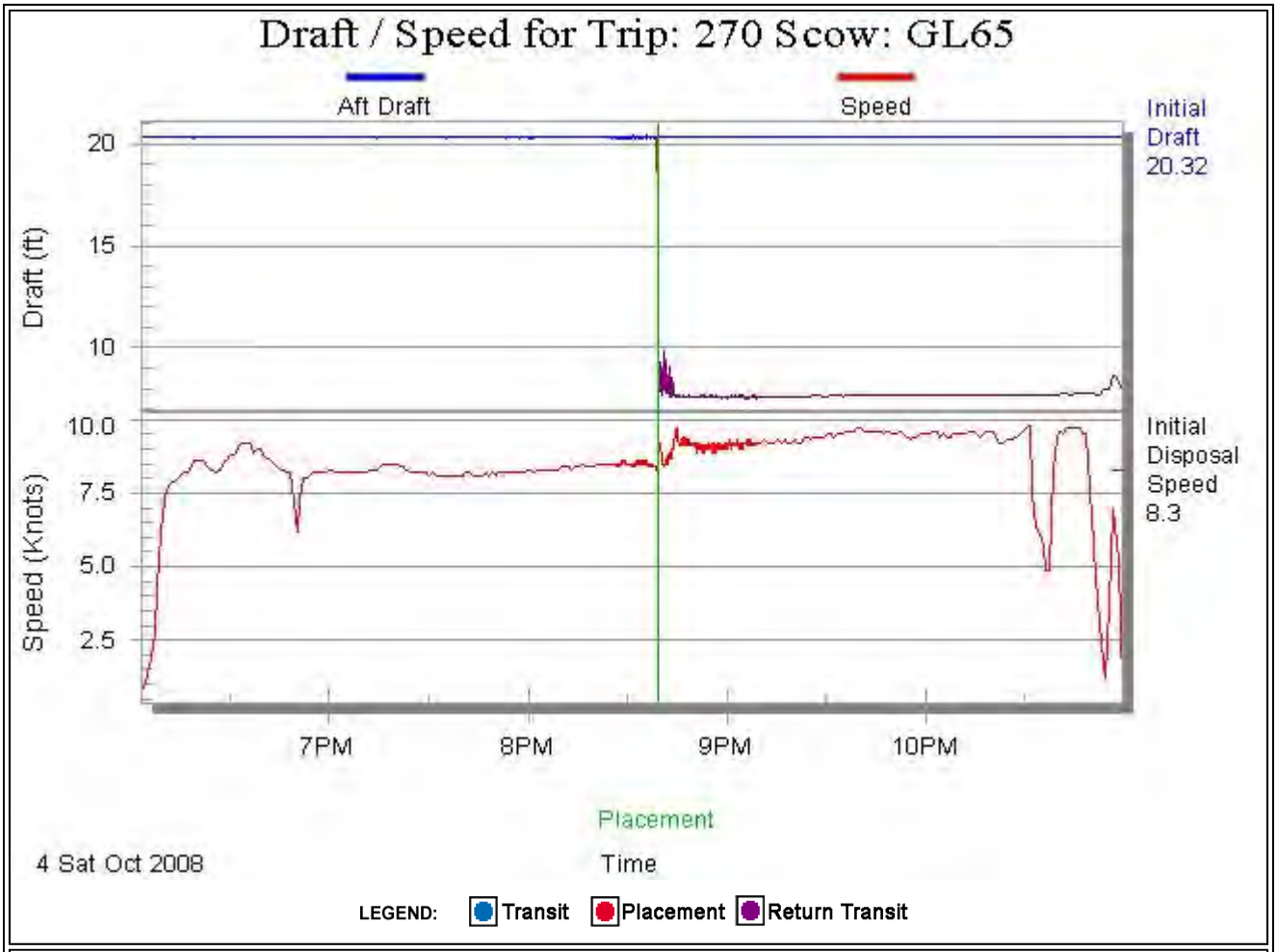

Trip Information

Trip #:	270
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	0 cu yd
Start Time:	10/4/2008 18:03:17
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/4/2008 20:39:01
Latitude:	42.429137
Longitude:	-70.581825
Aft Draft:	20.32 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/4/2008 20:39:17
Latitude:	42.429298
Longitude:	-70.580983
Aft Draft:	7.70 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100708_141902

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

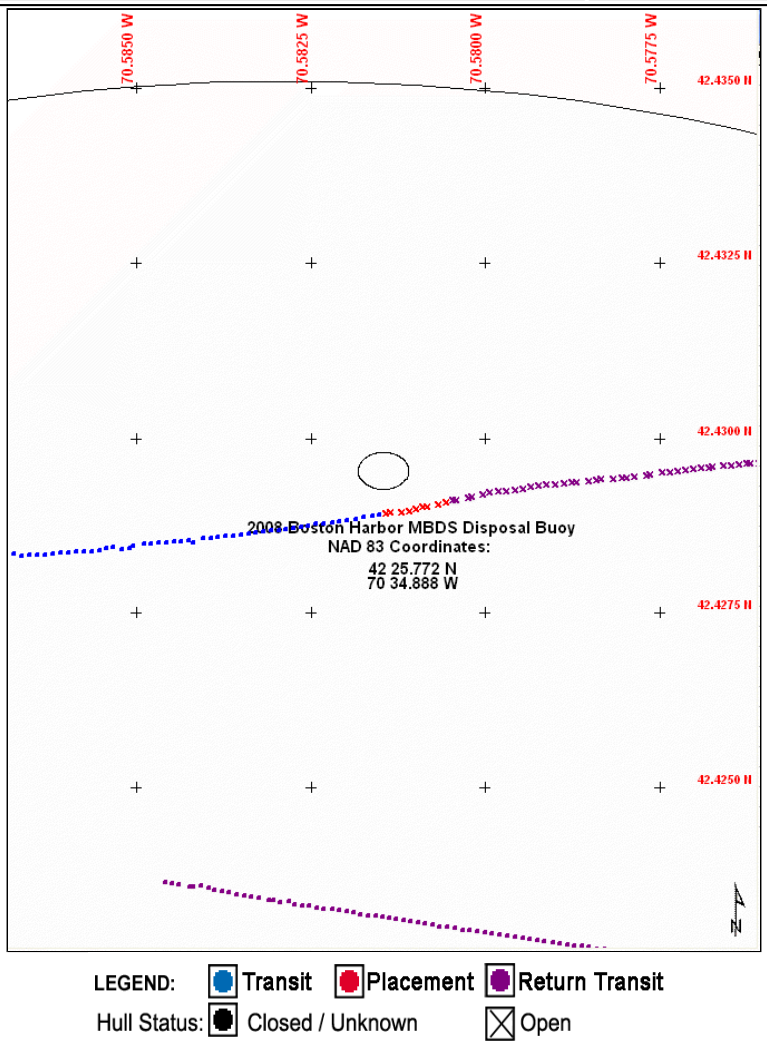
Trip #:	271
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/5/2008 03:18:08
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/5/2008 05:58:46	**Time:**	10/5/2008 05:59:02
Lat:	42.428910	**Lat:**	42.429065
Long:	-70.581411	**Long:**	-70.580566
Aft Draft:	18.45 ft	**Aft Draft:**	11.23 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/5/2008 3:01:00 AM (Local)
Wave Height: 1.3 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 100608_193226

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W912WJ-07-C-0023

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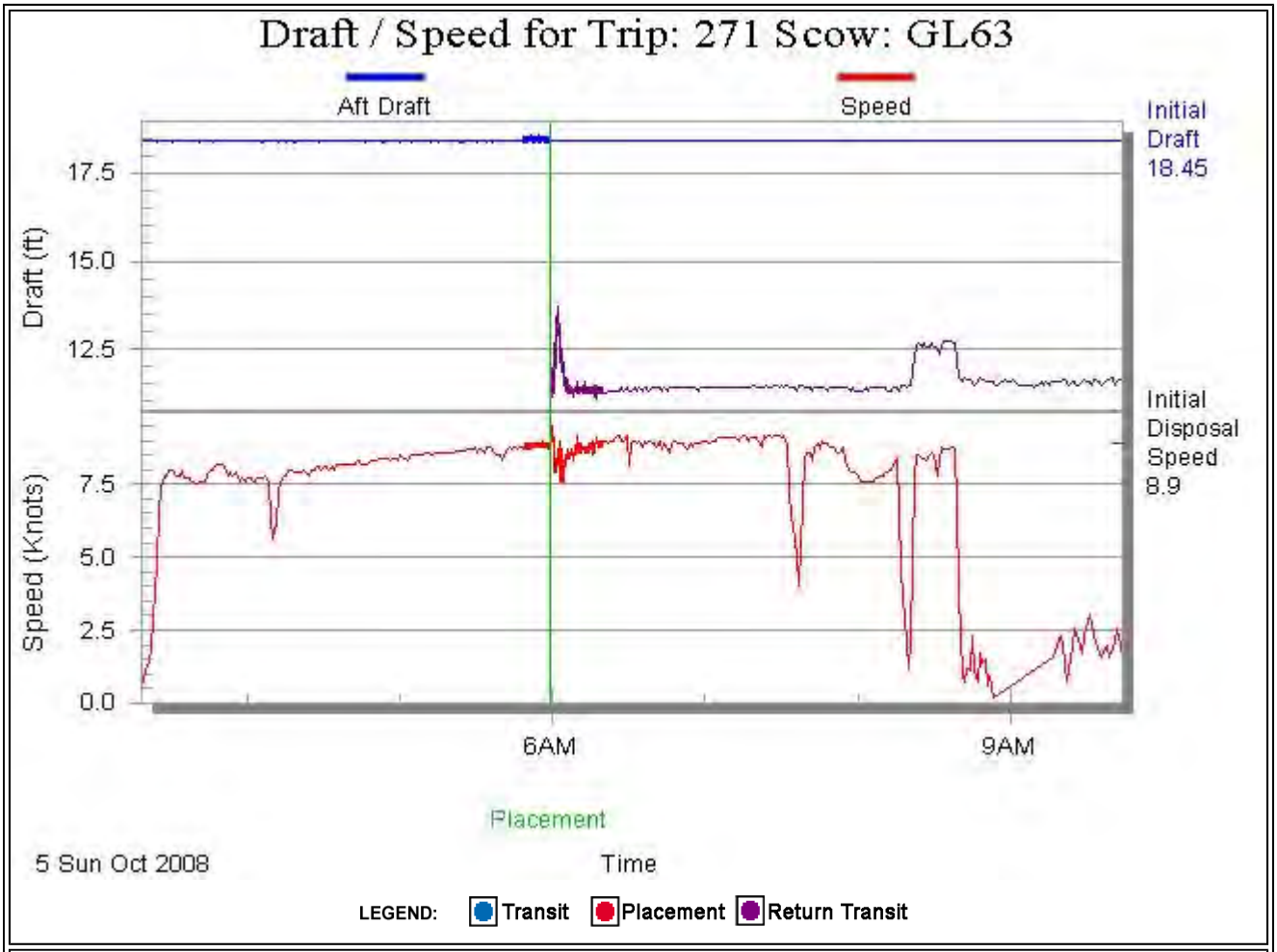

Trip Information

Trip #:	271
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/5/2008 03:18:08
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/5/2008 05:58:46
Latitude:	42.428910
Longitude:	-70.581411
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/5/2008 05:59:02
Latitude:	42.429065
Longitude:	-70.580566
Aft Draft:	11.23 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 100608_193226

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

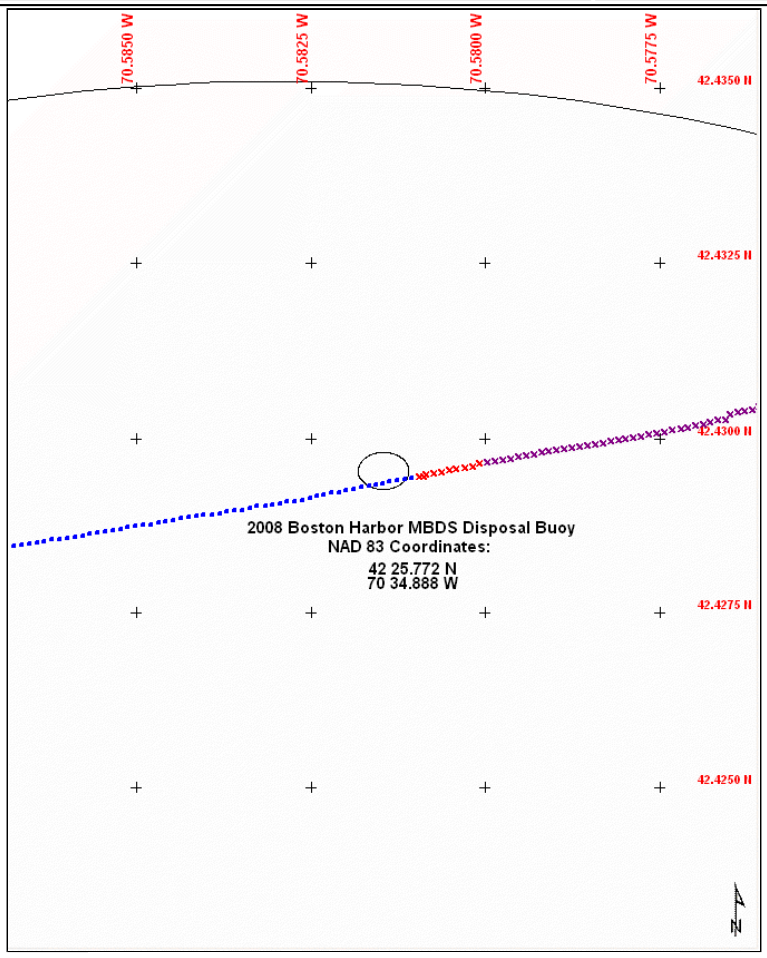
Trip #:	272
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/13/2008 11:34:16
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/13/2008 14:10:28	**Time:**	10/13/2008 14:10:44
Lat:	42.429457	**Lat:**	42.429641
Long:	-70.580945	**Long:**	-70.580087
Aft Draft:	18.53 ft	**Aft Draft:**	12.90 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/13/2008 12:20:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** Not Avail.



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101408_115834

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W912WJ-07-C-0023

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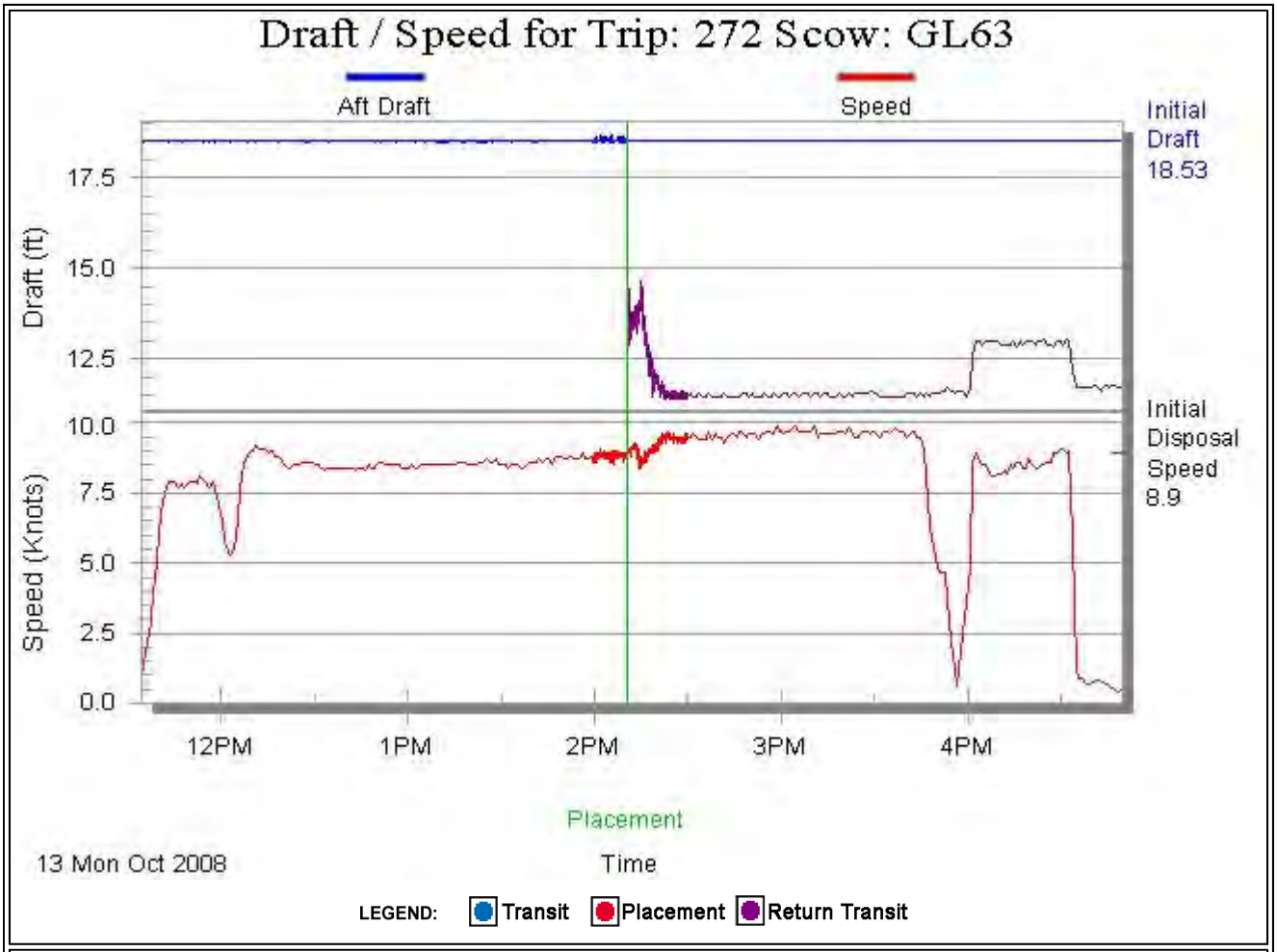


Trip Information

Trip #:	272
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/13/2008 11:34:16
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/13/2008 14:10:28
Latitude:	42.429457
Longitude:	-70.580945
Aft Draft:	18.53 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/13/2008 14:10:44
Latitude:	42.429641
Longitude:	-70.580087
Aft Draft:	12.90 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101408_115834

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

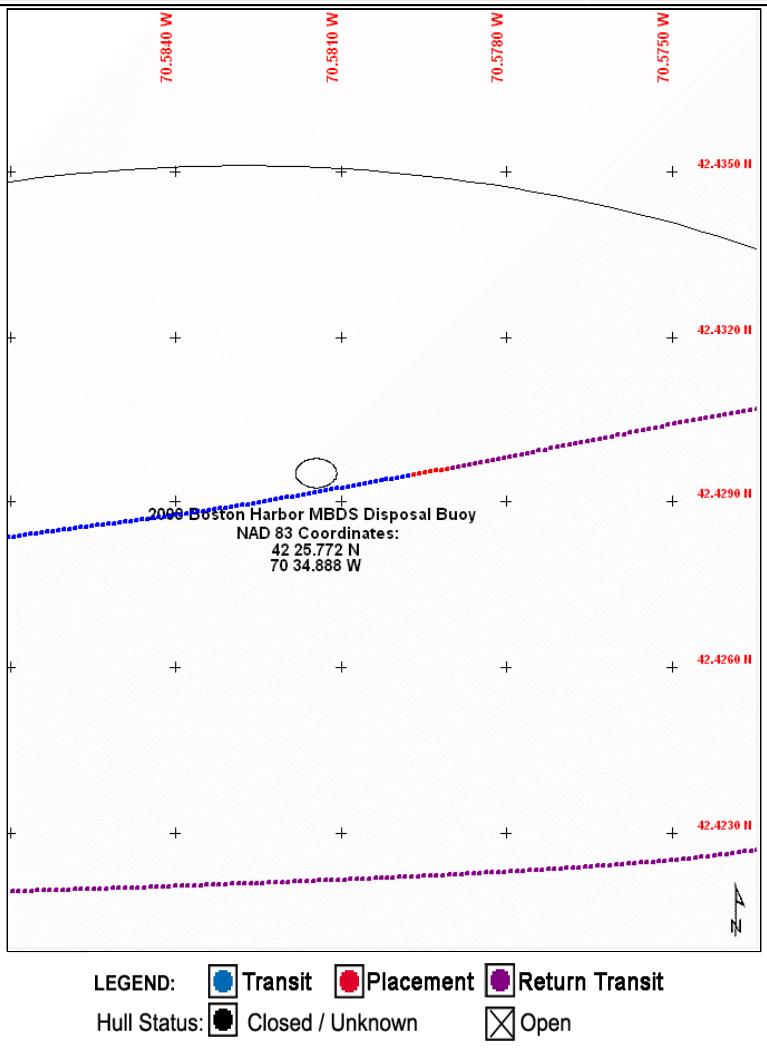
Trip #:	273
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	10/13/2008 19:18:49
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/13/2008 22:17:46	**Time:**	10/13/2008 22:17:58
Lat:	42.429507	**Lat:**	42.429623
Long:	-70.579681	**Long:**	-70.579075
Aft Draft:	20.32 ft	**Aft Draft:**	8.22 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/13/2008 7:11:00 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 111808_112058

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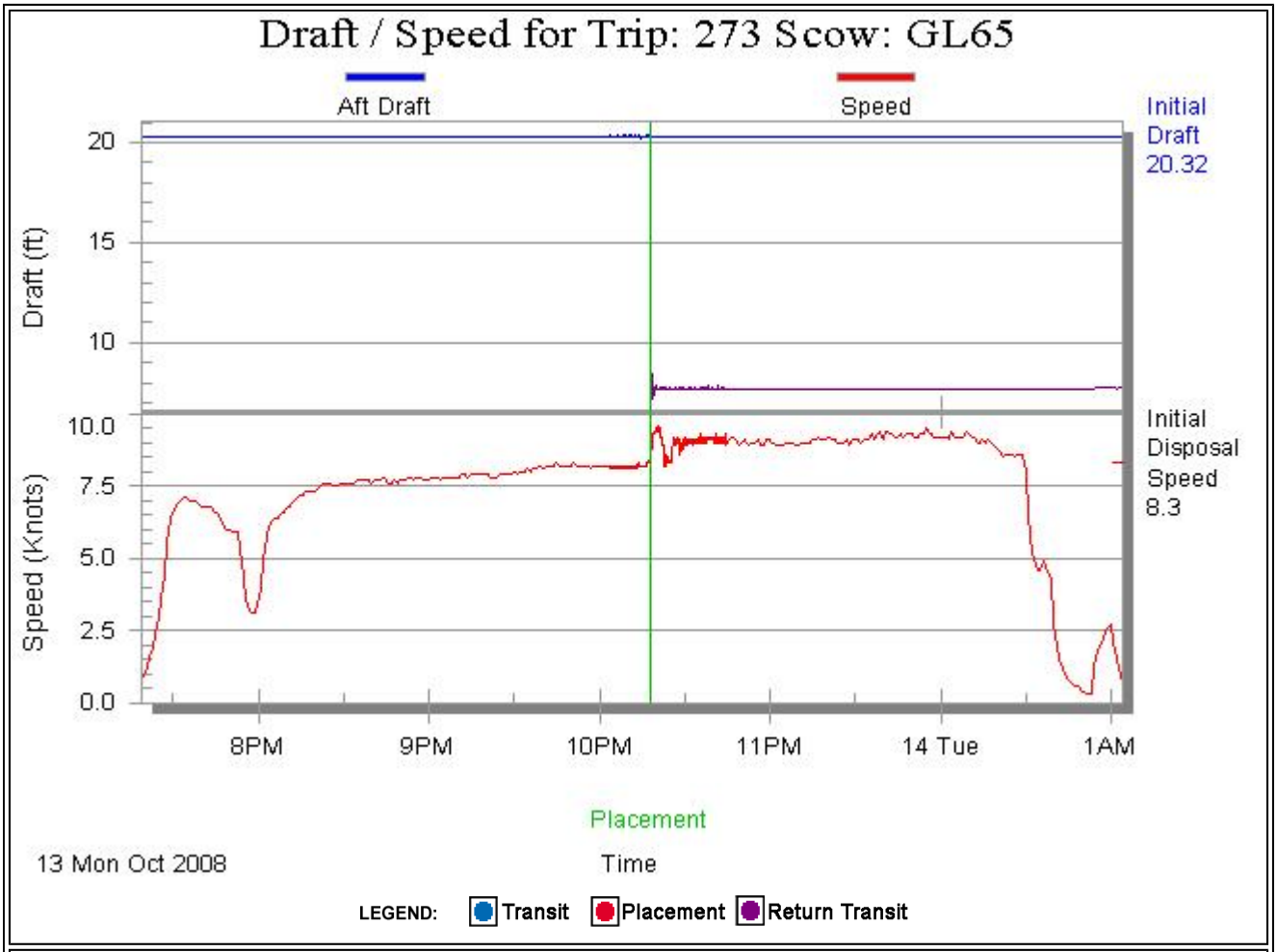

Trip Information

Trip #:	273
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	10/13/2008 19:18:49
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/13/2008 22:17:46	**Time:**	10/13/2008 22:17:58
Latitude:	42.429507	**Latitude:**	42.429623
Longitude:	-70.579681	**Longitude:**	-70.579075
Aft Draft:	20.32 ft	**Aft Draft:**	8.22 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 111808_112058

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

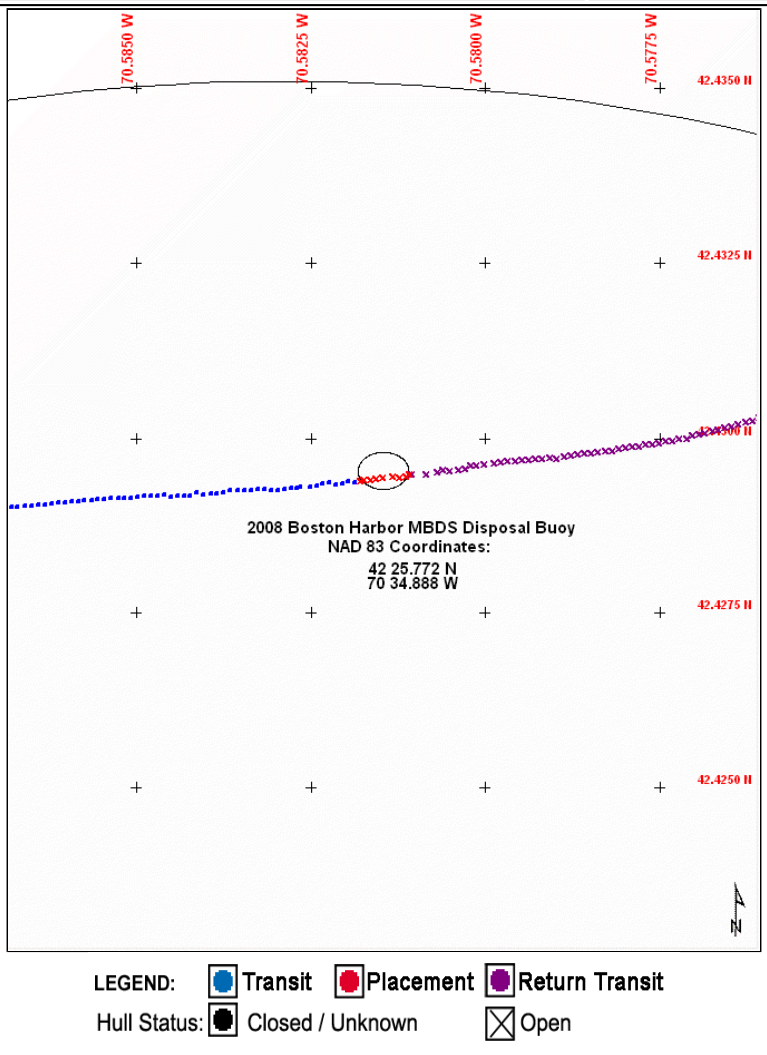
Trip #:	274
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5850 cu yd
Start Time:	10/14/2008 02:39:46
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	10/14/2008 05:36:54	10/14/2008 05:37:09
Lat:	42.429368	42.429489
Long:	-70.581795	-70.581095
Aft Draft:	18.45 ft	12.34 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/14/2008 2:47:00 AM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101408_120306

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W912WJ-07-C-0023

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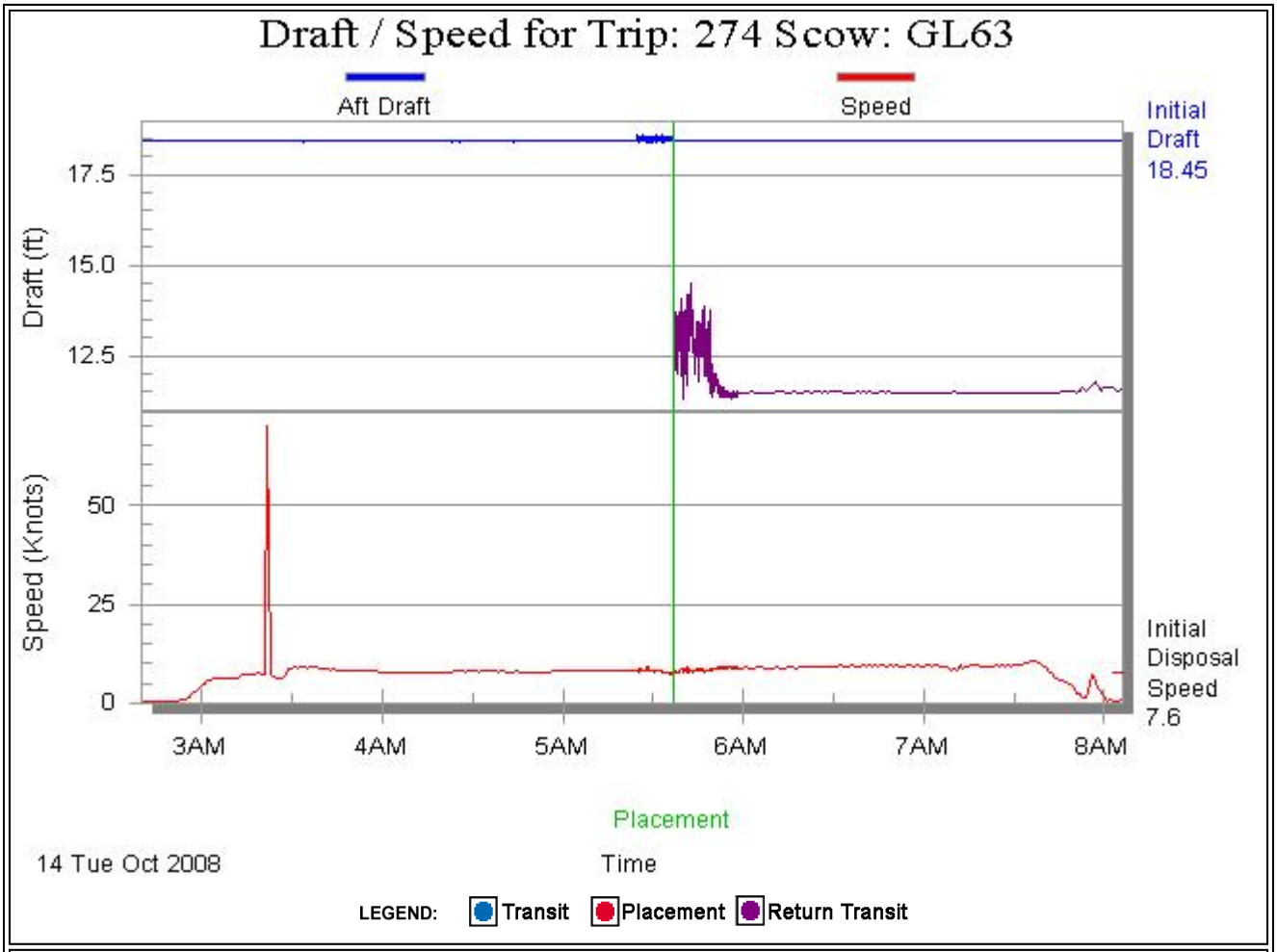

Trip Information

Trip #:	274
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5850 cu yd
Start Time:	10/14/2008 02:39:46
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/14/2008 05:36:54	**Time:**	10/14/2008 05:37:09
Latitude:	42.429368	**Latitude:**	42.429489
Longitude:	-70.581795	**Longitude:**	-70.581095
Aft Draft:	18.45 ft	**Aft Draft:**	12.34 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101408_120306

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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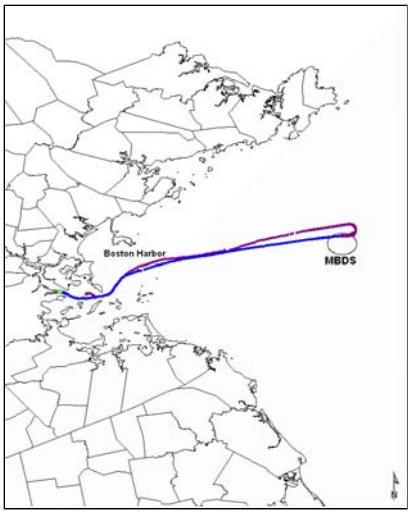
Trip Information:

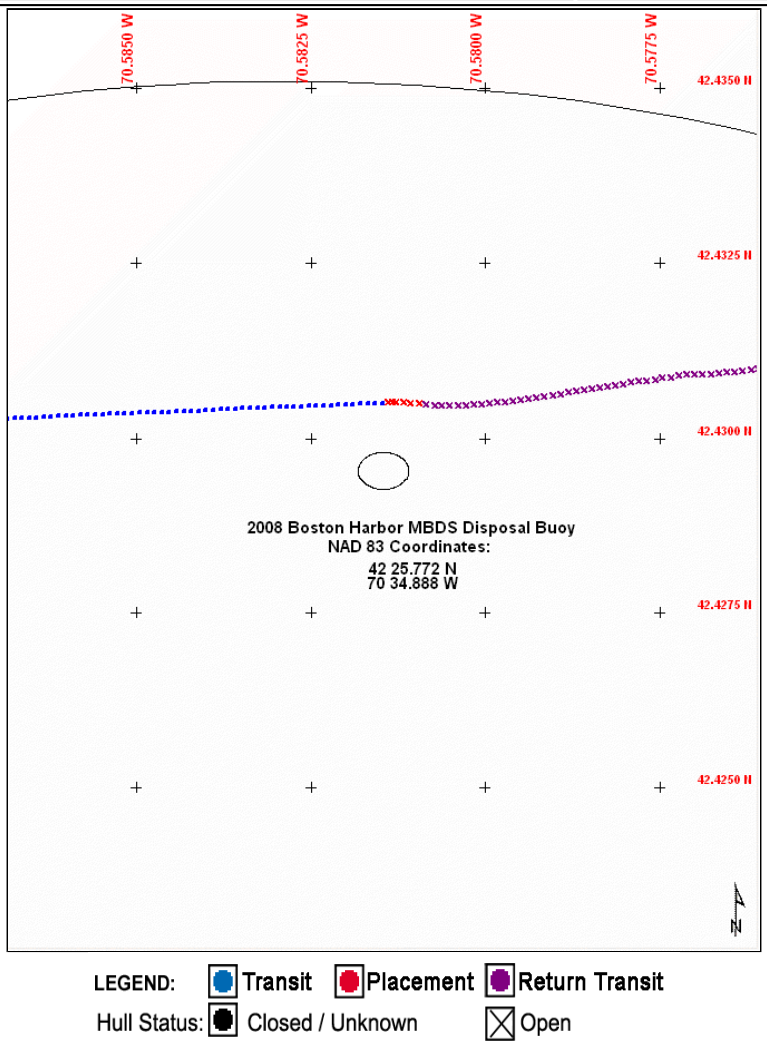
Trip #:	275
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	10/14/2008 10:35:28
Init Aft Draft:	19.07 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/14/2008 13:18:36	**Time:**	10/14/2008 13:18:44
Lat:	42.430510	**Lat:**	42.430495
Long:	-70.581384	**Long:**	-70.580951
Aft Draft:	16.63 ft	**Aft Draft:**	20.32 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/14/2008 1:26:00 PM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The fluctuations in draft readings durnig the out-bound transit of load #275 are due to the draft sensor being incorrectly installed. Great Lakes personnel contacted SAIC on 10/15/08 and reported that while the scow was in dry dock being repaired, the draft sensor was removed and the stilling well was repositioned. After repairs were completed, the draft sensor was incorrectly re-installed. The sensor was not placed in the stilling well as is normal, but was simply placed in the ram well.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

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W912WJ-07-C-0023

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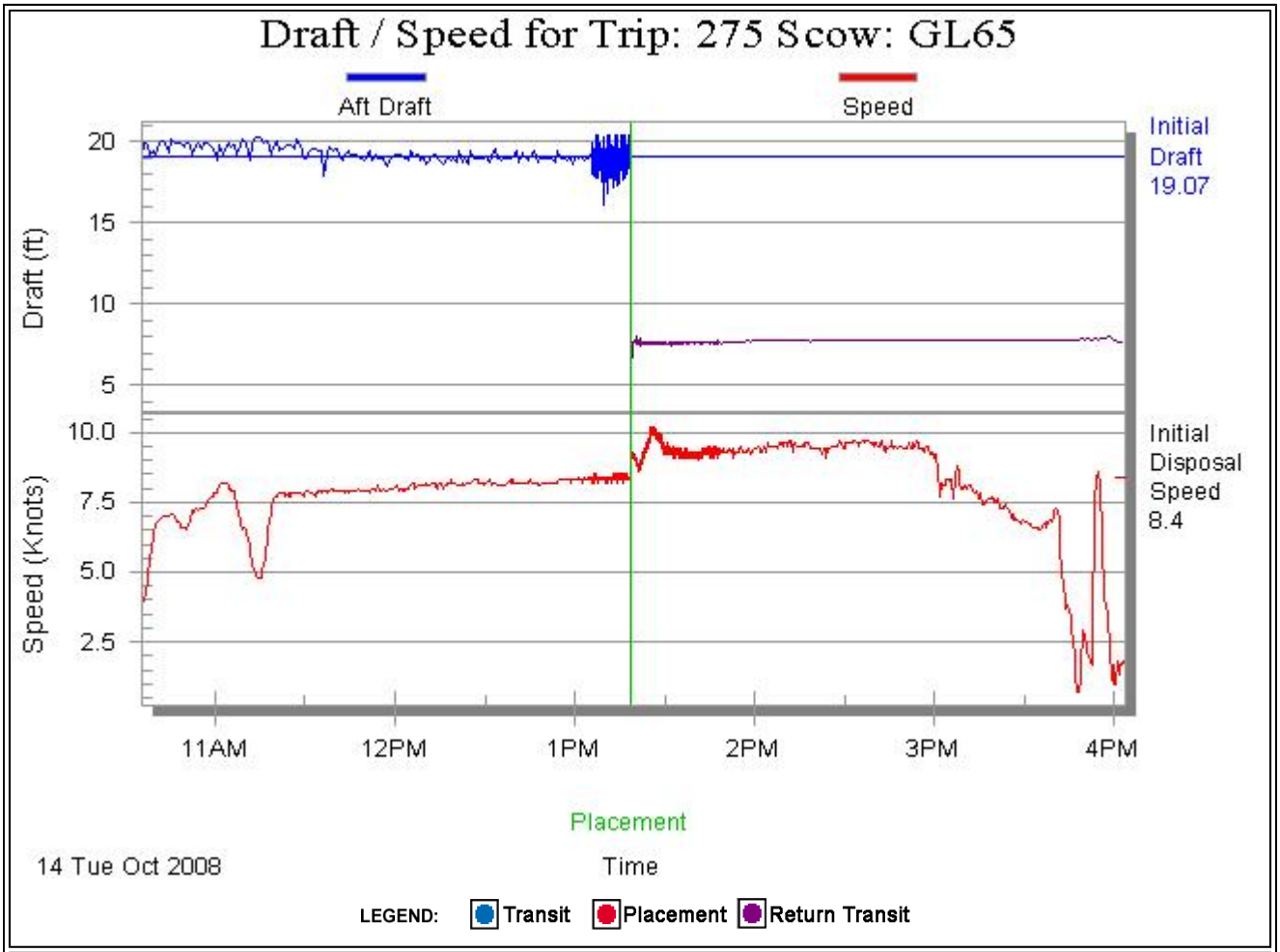


Trip Information

Trip #:	275
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	10/14/2008 10:35:28
Init Aft Draft:	19.07 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	10/14/2008 13:18:36	**Time:**	10/14/2008 13:18:44
Latitude:	42.430510	**Latitude:**	42.430495
Longitude:	-70.581384	**Longitude:**	-70.580951
Aft Draft:	16.63 ft	**Aft Draft:**	20.32 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The fluctuations in draft readings durnig the out-bound transit of load #275 are due to the draft sensor being incorrectly installed. Great Lakes personnel contacted SAIC on 10/15/08 and reported that while the scow was in dry dock being repaired, the draft sensor was removed and the stilling well was repositioned. After repairs were completed, the draft sensor was incorrectly re-installed. The sensor was not placed in the stilling well as is normal, but was simply placed in the ram well.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101508_130430

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

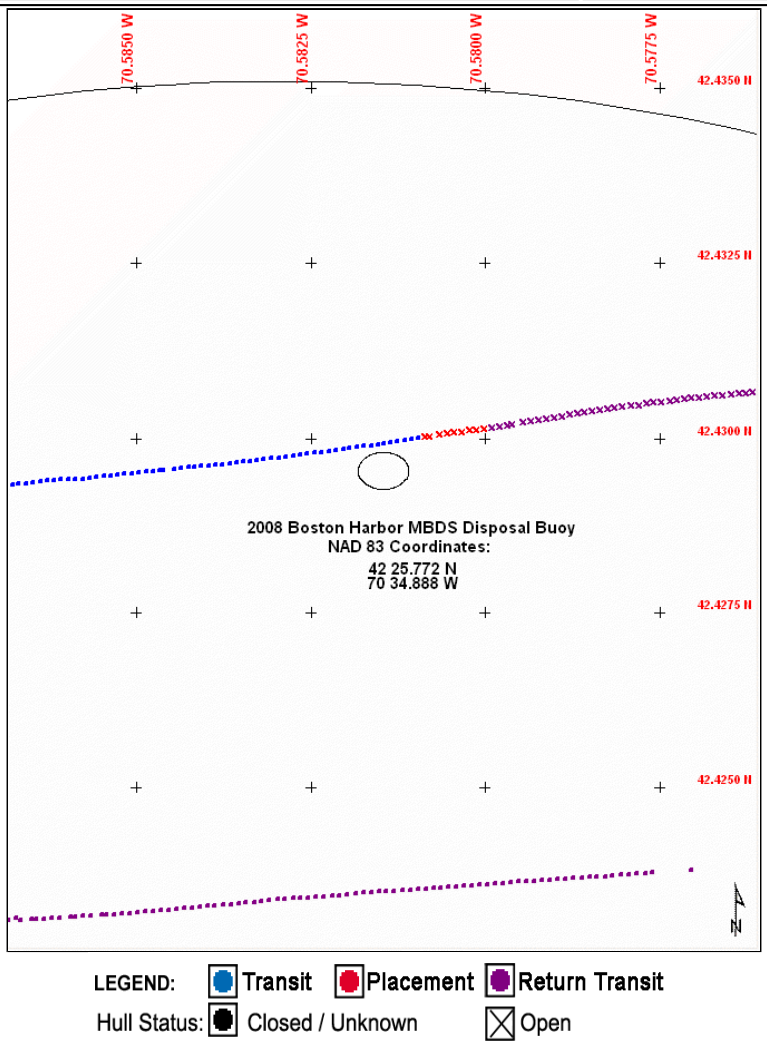
Trip #:	276
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	10/14/2008 17:56:40
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/14/2008 20:45:32	**Time:**	10/14/2008 20:45:48
Lat:	42.430019	**Lat:**	42.430140
Long:	-70.580854	**Long:**	-70.580017
Aft Draft:	18.53 ft	**Aft Draft:**	11.70 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/14/2008 5:50:00 PM (Local)
Wave Height: Not Avail. **Dominant Wave Period:** Not Avail. **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The apparent gap in out-bound transit data between 7:39 PM and 7:53 PM on 10/14/08 (Local) is the result of faulty GPS readings. SAIC intends on replacing the GPS antenna installed on the GL63 on 10/15/08.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101508_124846

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W912WJ-07-C-0023

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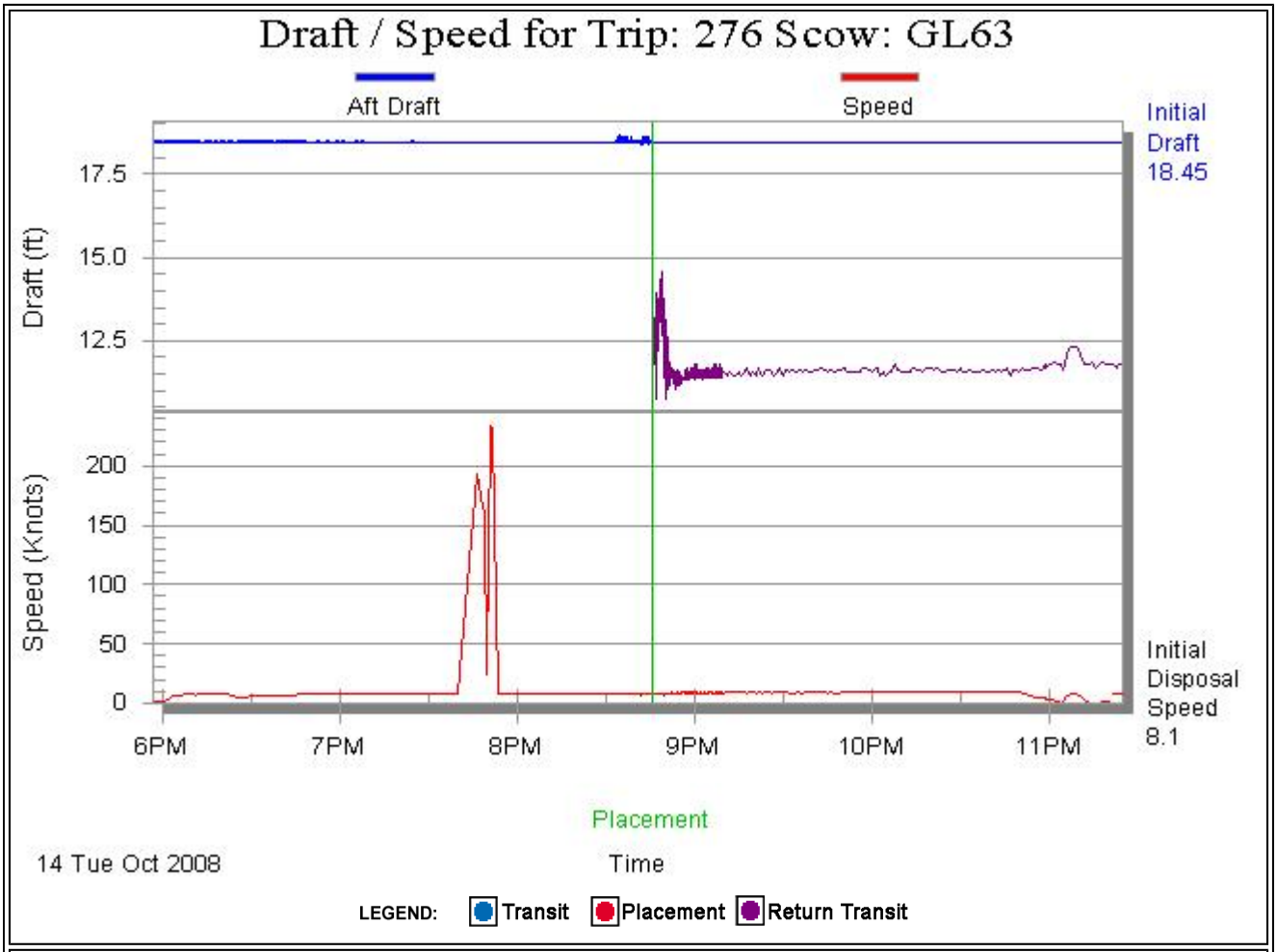


Trip Information

Trip #:	276
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5600 cu yd
Start Time:	10/14/2008 17:56:40
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/14/2008 20:45:32	**Time:**	10/14/2008 20:45:48
Latitude:	42.430019	**Latitude:**	42.430140
Longitude:	-70.580854	**Longitude:**	-70.580017
Aft Draft:	18.53 ft	**Aft Draft:**	11.70 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The apparent gap in out-bound transit data between 7:39 PM and 7:53 PM on 10/14/08 (Local) is the result of faulty GPS readings. SAIC intends on replacing the GPS antenna installed on the GL63 on 10/15/08.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101508_124846

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

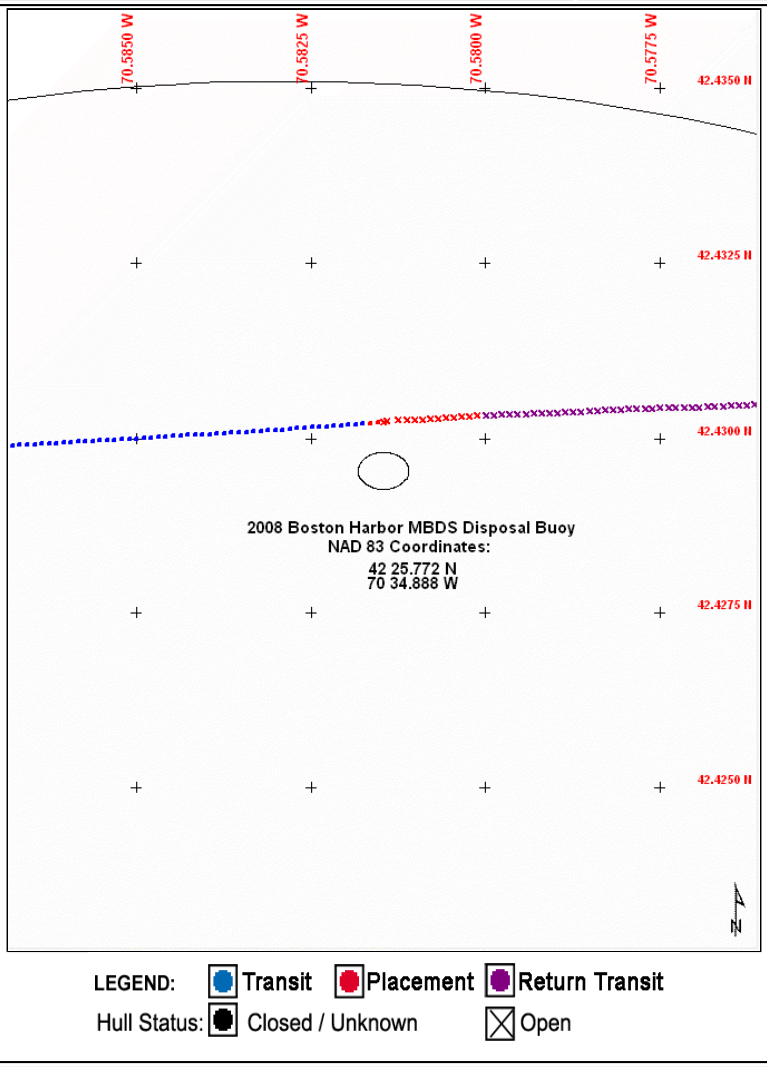
Trip #:	277
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	10/15/2008 00:53:52
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/15/2008 04:27:00	**Time:**	10/15/2008 04:27:28
Lat:	42.430219	**Lat:**	42.430319
Long:	-70.581656	**Long:**	-70.580109
Aft Draft:	18.62 ft	**Aft Draft:**	7.03 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/15/2008 6:05:00 AM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The fluctuations in draft readings durnig the out-bound transit of load #275 are due to the draft sensor being incorrectly installed. Great Lakes personnel contacted SAIC on 10/15/08 and reported that while the scow was in dry dock being repaired, the draft sensor was removed and the stilling well was repositioned. After repairs were completed, the draft sensor was incorrectly re-installed. The sensor was not placed in the stilling well as is normal, but was simply placed in the ram well. Additionally, due to the sensor being incorrectly installed, it was damaged during load #277. It is SAICs belief that the sensor was caught between the scow doors and damaged as the scow was closing. SAIC will travel to the dredging location on 10/15/08 to replace the sensor.

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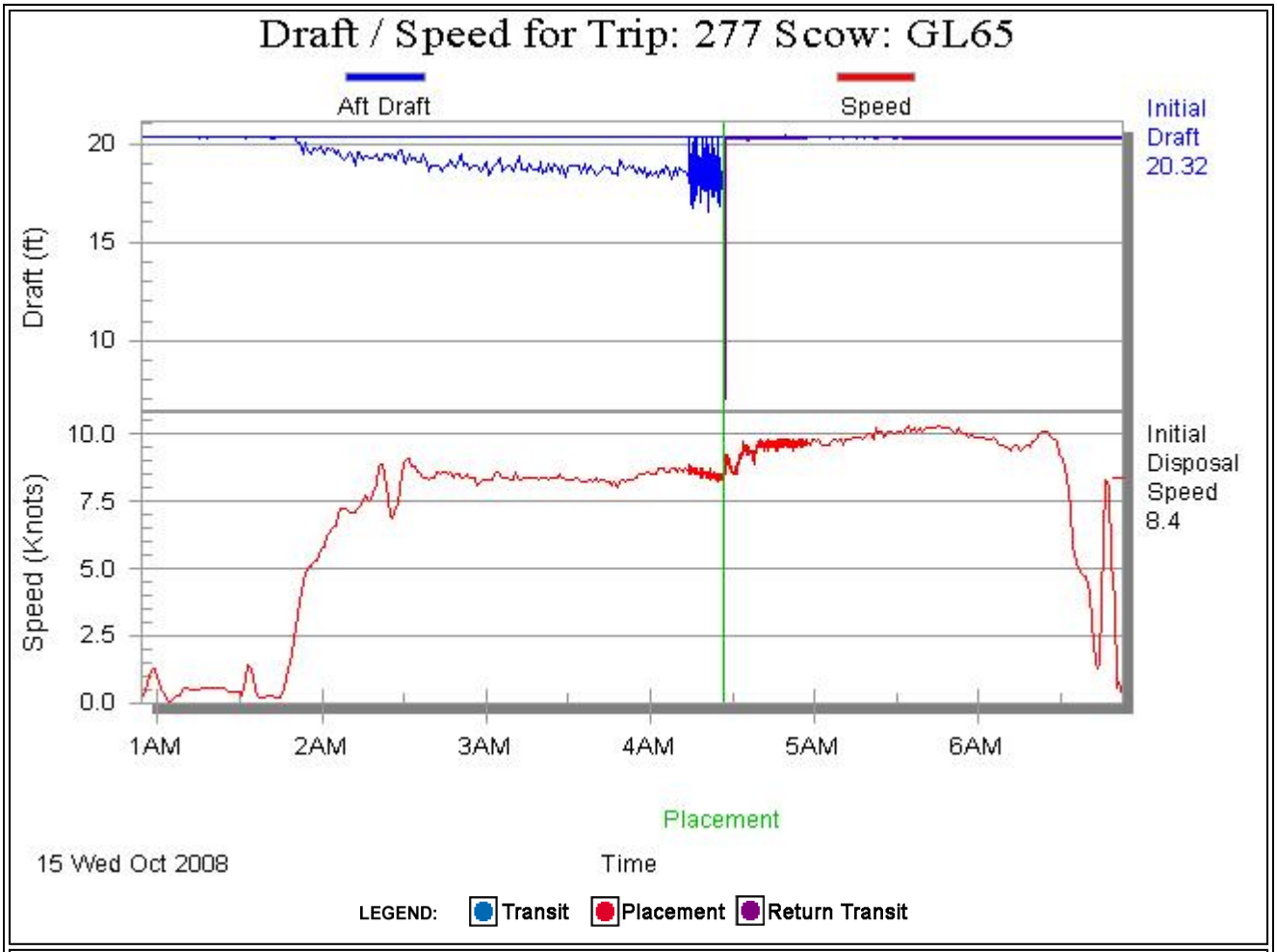


Trip Information

Trip #:	277
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	10/15/2008 00:53:52
Init Aft Draft:	20.32 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	10/15/2008 04:27:00	**Time:**	10/15/2008 04:27:28
Latitude:	42.430219	**Latitude:**	42.430319
Longitude:	-70.581656	**Longitude:**	-70.580109
Aft Draft:	18.62 ft	**Aft Draft:**	7.03 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The fluctuations in draft readings durnig the out-bound transit of load #275 are due to the draft sensor being incorrectly installed. Great Lakes personnel contacted SAIC on 10/15/08 and reported that while the scow was in dry dock being repaired, the draft sensor was removed and the stilling well was repositioned. After repairs were completed, the draft sensor was incorrectly re-installed. The sensor was not placed in the stilling well as is normal, but was simply placed in the ram well. Additionally, due to the sensor being incorrectly installed, it was damaged during load #277. It is SAICs belief that the sensor was caught between the scow doors and damaged as the scow was closing. SAIC will travel to the dredging location on 10/15/08 to replace the sensor.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101508_131501

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

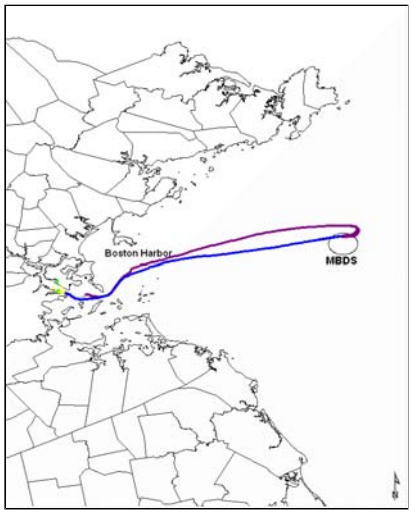
Trip Information:

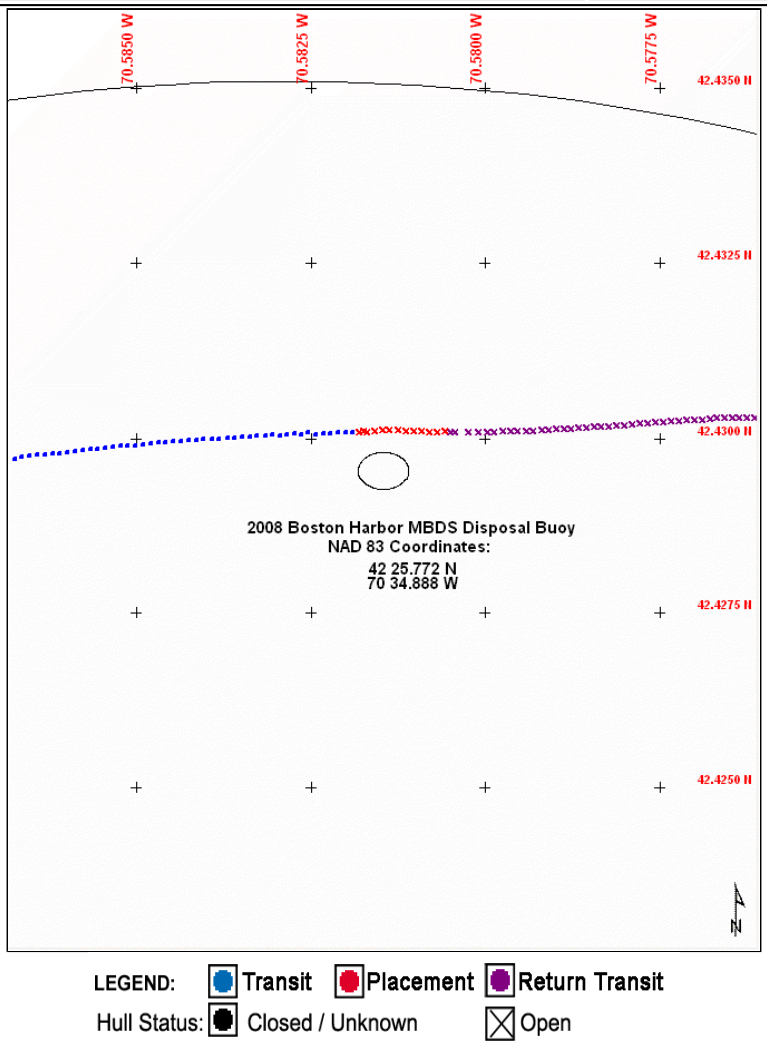
Trip #:	278
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5300 cu yd
Start Time:	10/15/2008 10:58:44
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/15/2008 13:44:47	**Time:**	10/15/2008 13:45:09
Lat:	42.430097	**Lat:**	42.430100
Long:	-70.581811	**Long:**	-70.580581
Aft Draft:	18.53 ft	**Aft Draft:**	12.50 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/15/2008 10:58:44 AM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101708_115035

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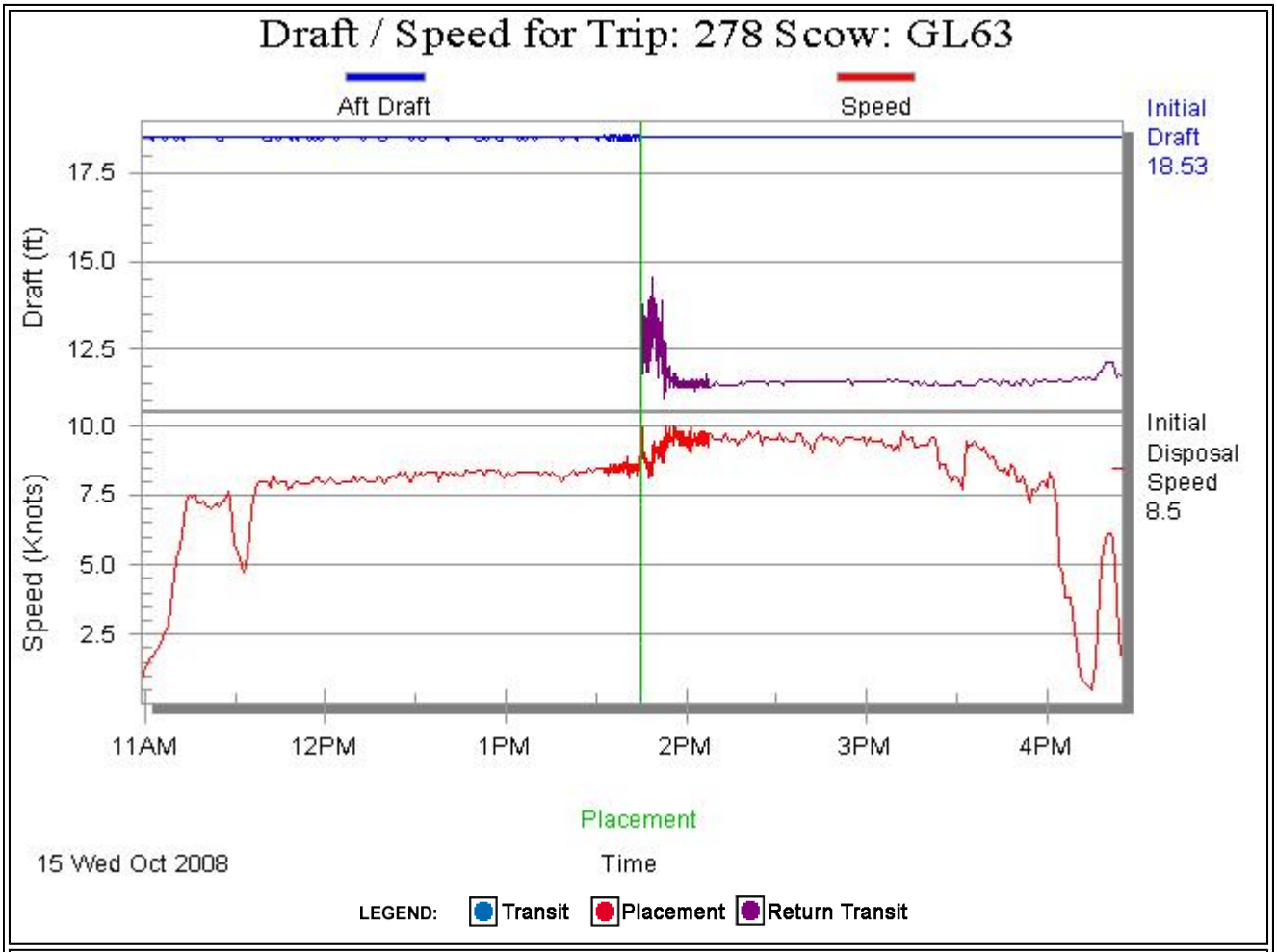

Trip Information

Trip #:	278
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5300 cu yd
Start Time:	10/15/2008 10:58:44
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/15/2008 13:44:47	**Time:**	10/15/2008 13:45:09
Latitude:	42.430097	**Latitude:**	42.430100
Longitude:	-70.581811	**Longitude:**	-70.580581
Aft Draft:	18.53 ft	**Aft Draft:**	12.50 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101708_115035

2008 Boston Harbor Maintenance Dredging
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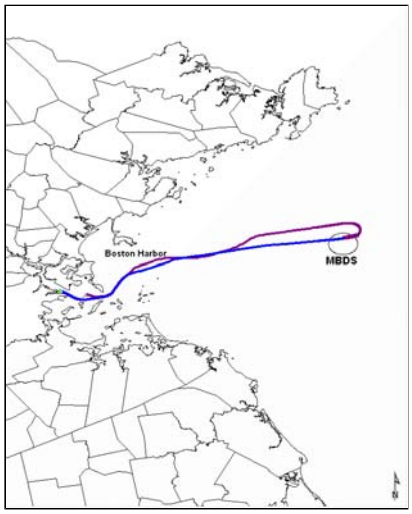
Trip Information:

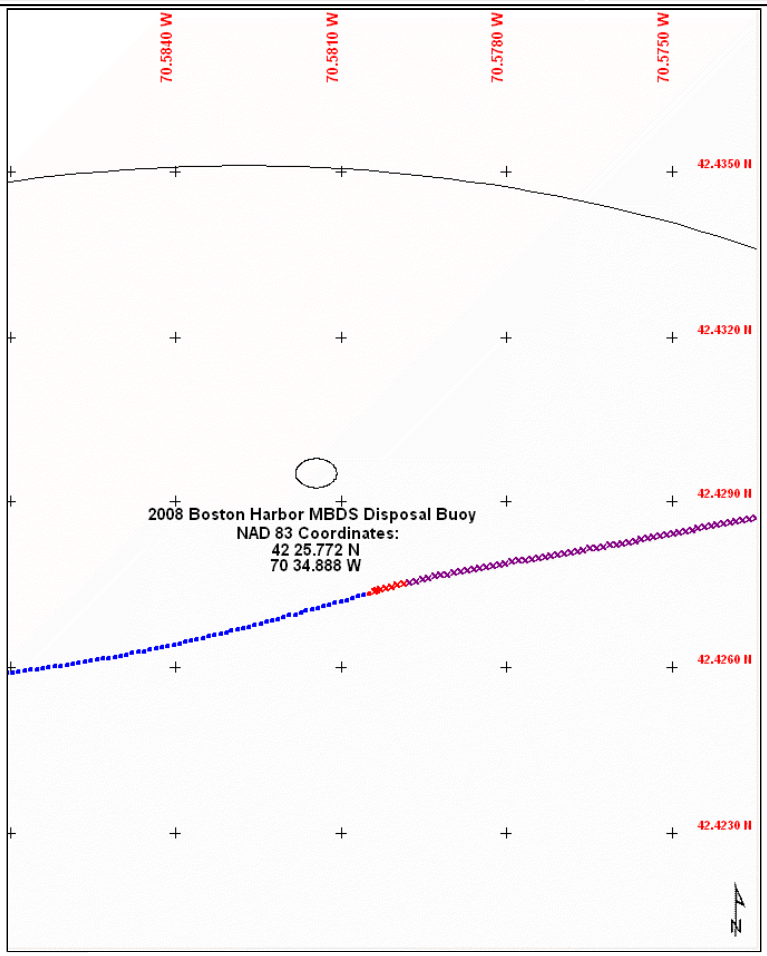
Trip #:	279
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/15/2008 23:41:32
Init Aft Draft:	20.82 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/16/2008 02:43:56	**Time:**	10/16/2008 02:44:08
Lat:	42.427337	**Lat:**	42.427512
Long:	-70.580498	**Long:**	-70.579855
Aft Draft:	19.84 ft	**Aft Draft:**	12.44 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/15/2008 11:41:32 PM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101708_151937

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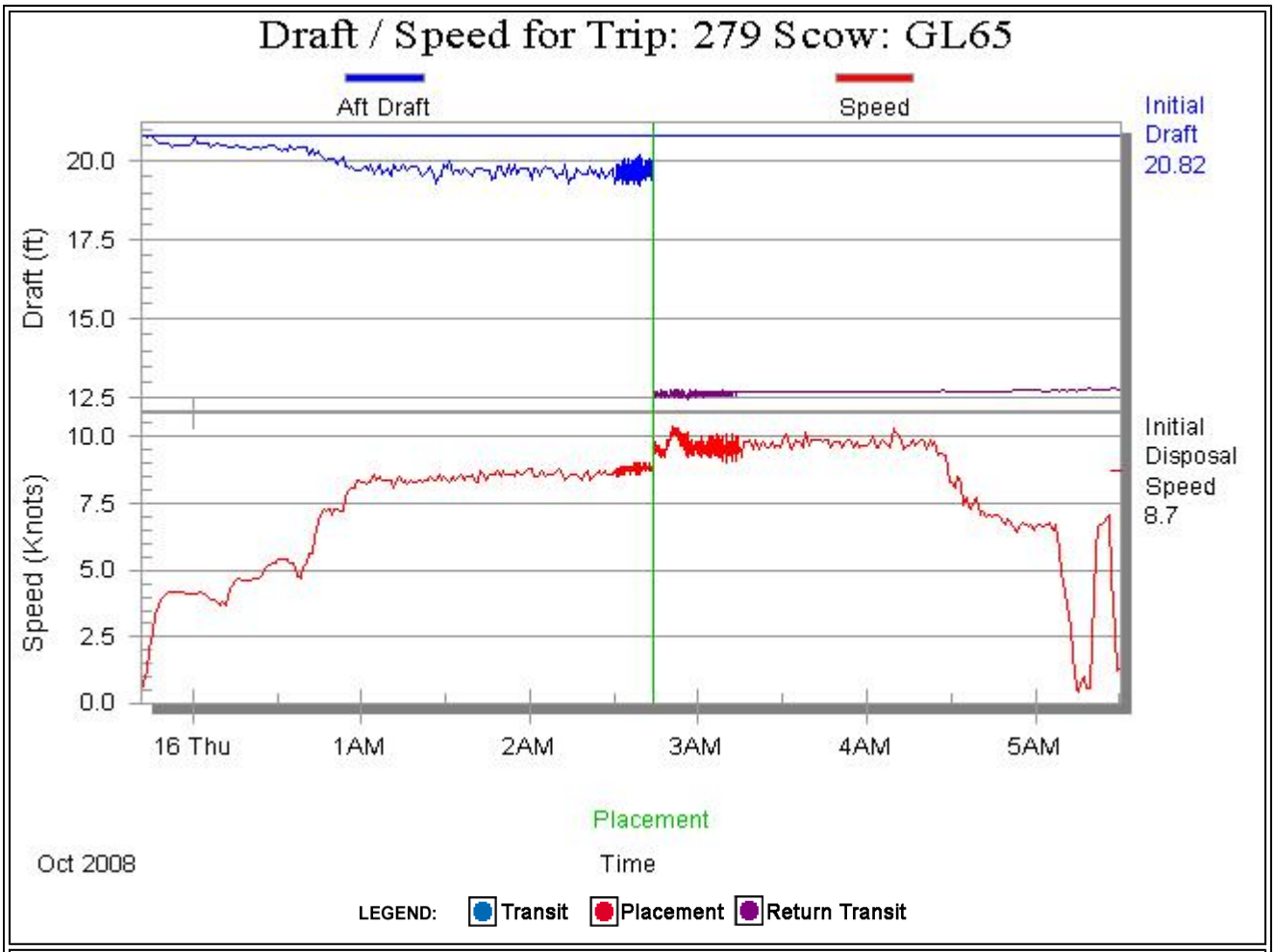

Trip Information

Trip #:	279
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/15/2008 23:41:32
Init Aft Draft:	20.82 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/16/2008 02:43:56	**Time:**	10/16/2008 02:44:08
Latitude:	42.427337	**Latitude:**	42.427512
Longitude:	-70.580498	**Longitude:**	-70.579855
Aft Draft:	19.84 ft	**Aft Draft:**	12.44 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101708_151937

2008 Boston Harbor Maintenance Dredging
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Trip Information:

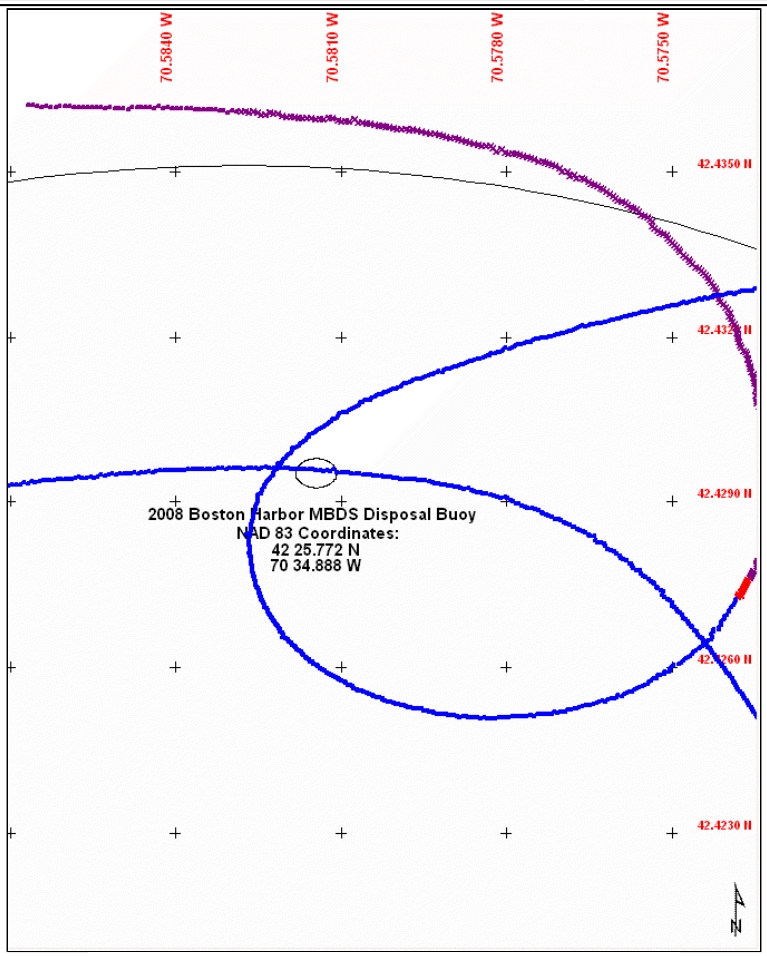
Trip #:	280
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/16/2008 08:46:11
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	10/16/2008 12:49:02	10/16/2008 12:49:18
Lat:	42.427278	42.427580
Long:	-70.573809	-70.573626
Aft Draft:	18.53 ft	12.26 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/16/2008 8:46:11 AM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 8.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target on the second attempt.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101708_120727

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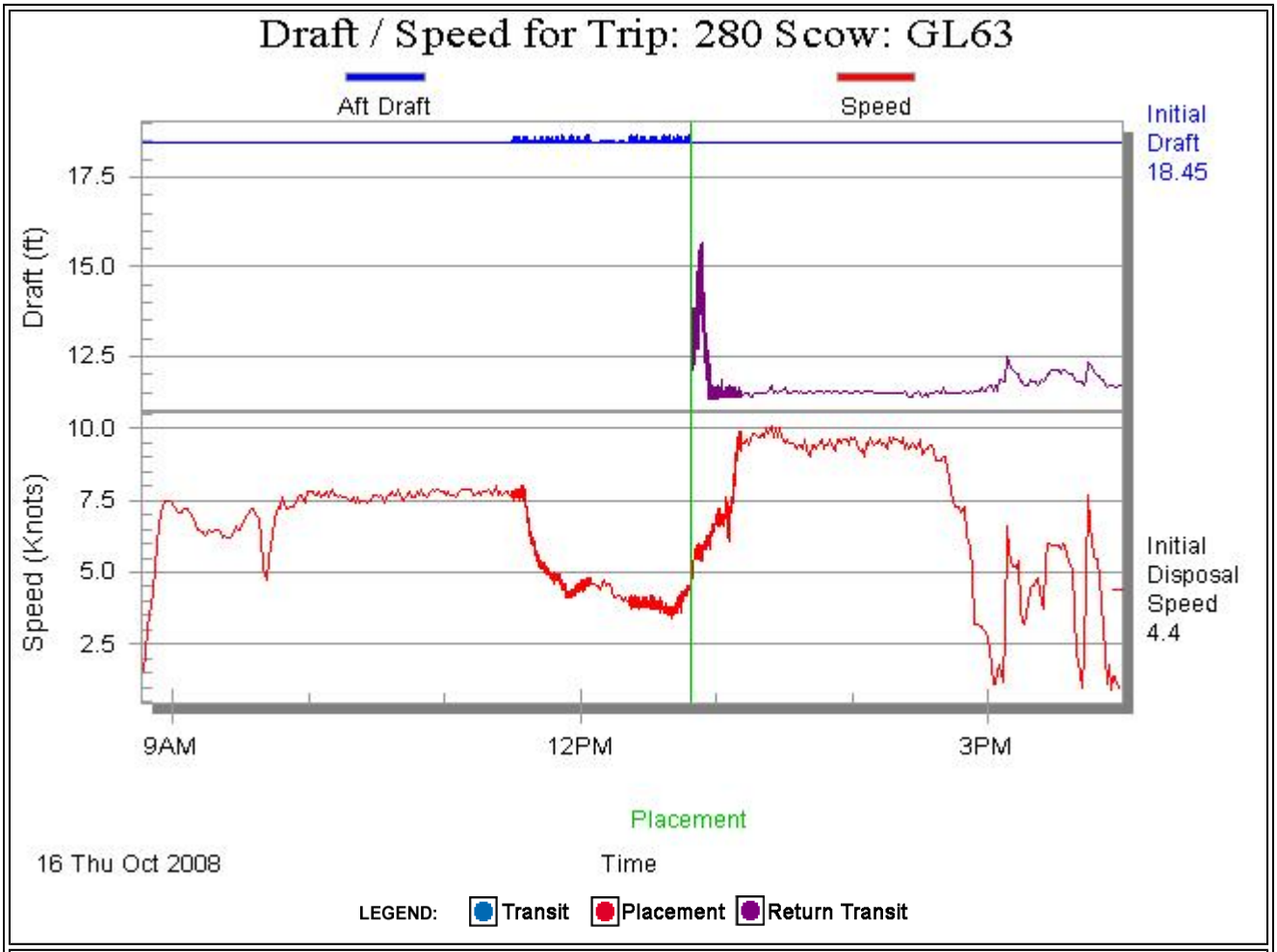

Trip Information

Trip #:	280
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/16/2008 08:46:11
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/16/2008 12:49:02	**Time:**	10/16/2008 12:49:18
Latitude:	42.427278	**Latitude:**	42.427580
Longitude:	-70.573809	**Longitude:**	-70.573626
Aft Draft:	18.53 ft	**Aft Draft:**	12.26 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target on the second attempt.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101708_120727

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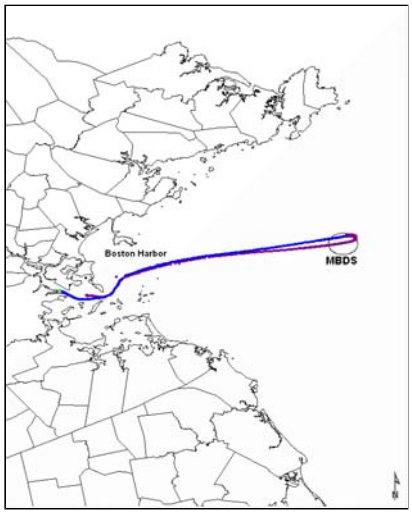
Trip Information:

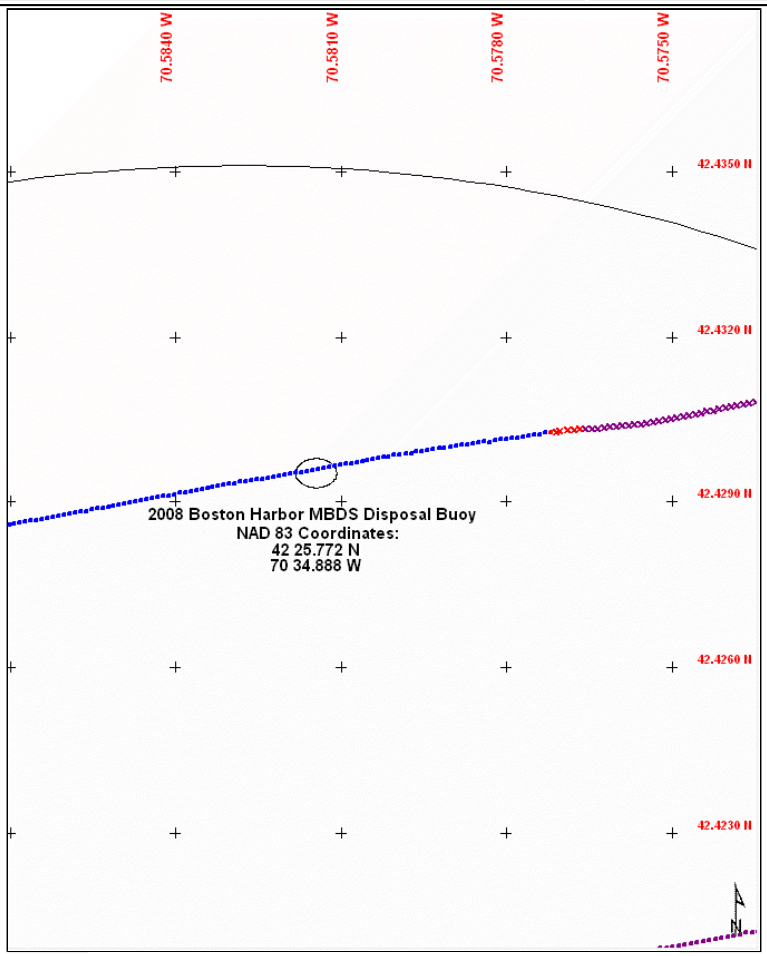
Trip #:	281
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/16/2008 15:55:42
Init Aft Draft:	21.20 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/16/2008 19:04:50	**Time:**	10/16/2008 19:05:00
Lat:	42.430282	**Lat:**	42.430331
Long:	-70.577200	**Long:**	-70.576677
Aft Draft:	20.22 ft	**Aft Draft:**	12.07 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/16/2008 3:55:42 PM (Local)
Wave Height: 2.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101708_152348

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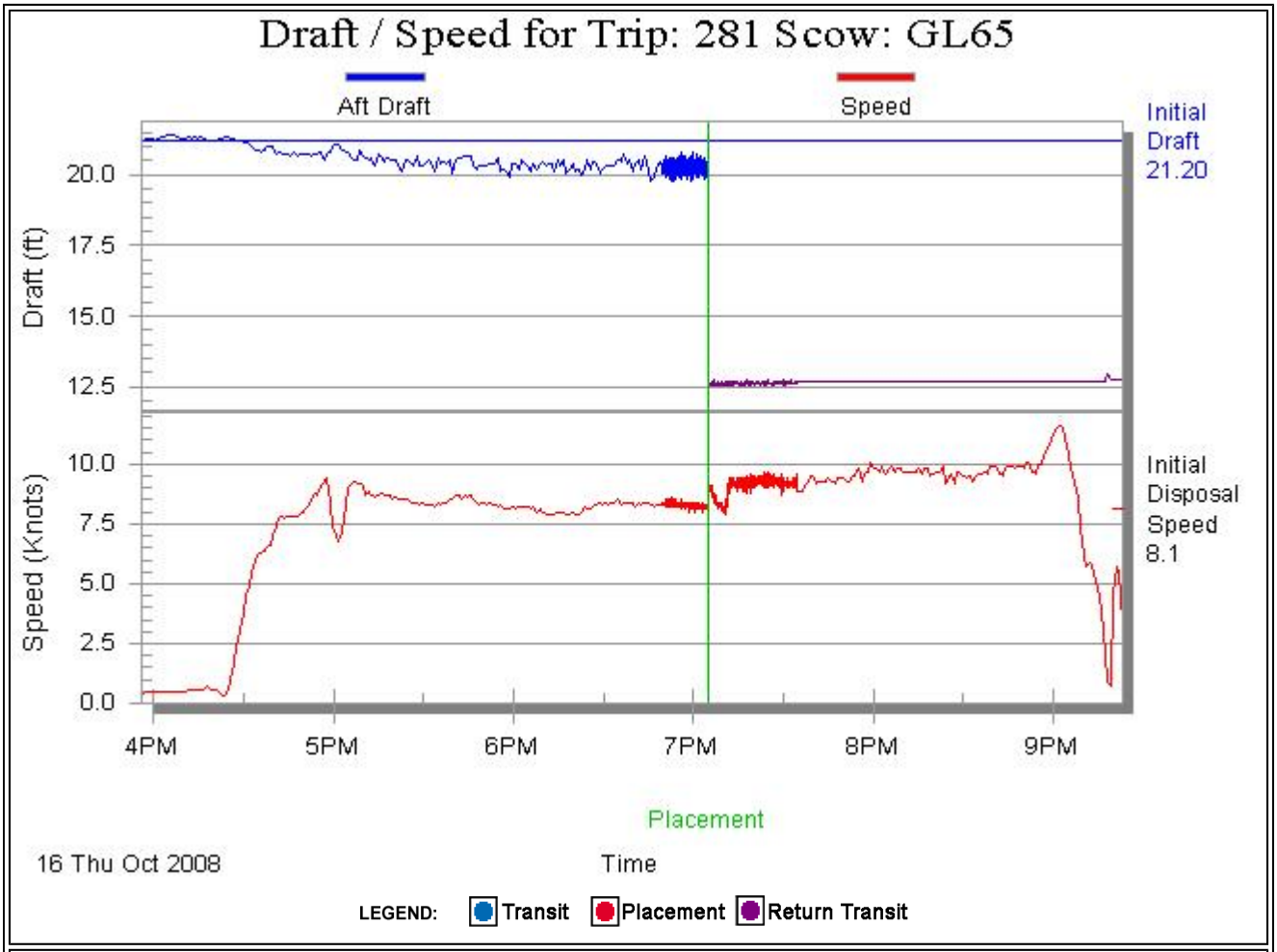

Trip Information

Trip #:	281
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/16/2008 15:55:42
Init Aft Draft:	21.20 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	10/16/2008 19:04:50	**Time:**	10/16/2008 19:05:00
Latitude:	42.430282	**Latitude:**	42.430331
Longitude:	-70.577200	**Longitude:**	-70.576677
Aft Draft:	20.22 ft	**Aft Draft:**	12.07 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101708_152348

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Trip Information:

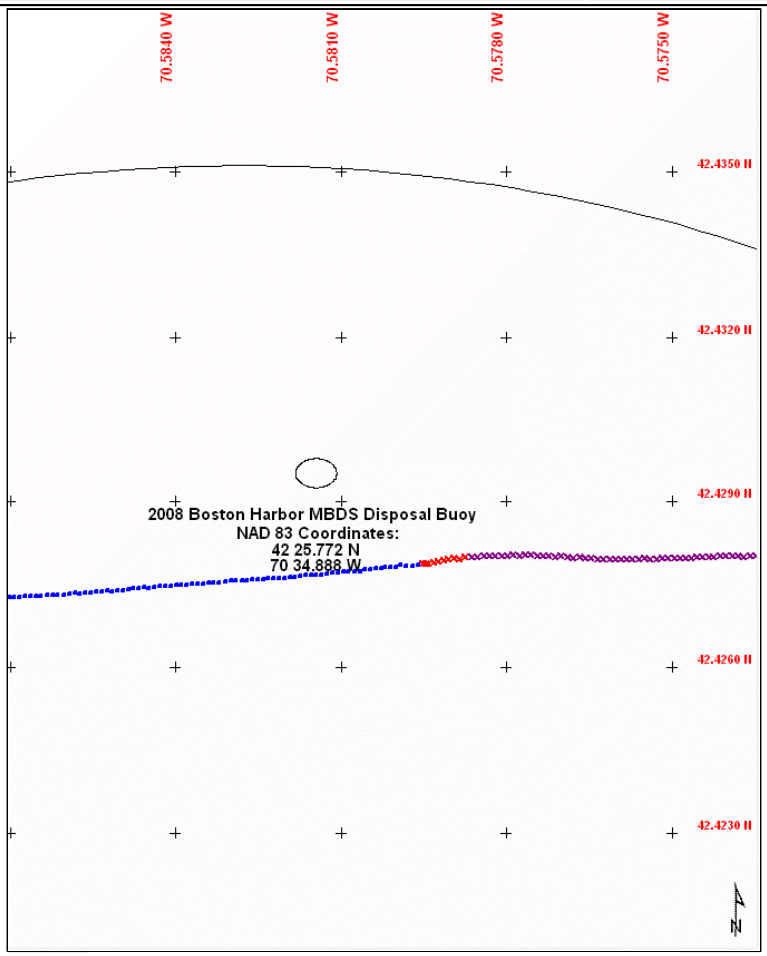
Trip #:	282
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/17/2008 00:54:20
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/17/2008 04:04:12	**Time:**	10/17/2008 04:04:28
Lat:	42.427885	**Lat:**	42.427993
Long:	-70.579514	**Long:**	-70.578743
Aft Draft:	18.45 ft	**Aft Draft:**	12.42 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/17/2008 12:54:20 AM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101708_121555

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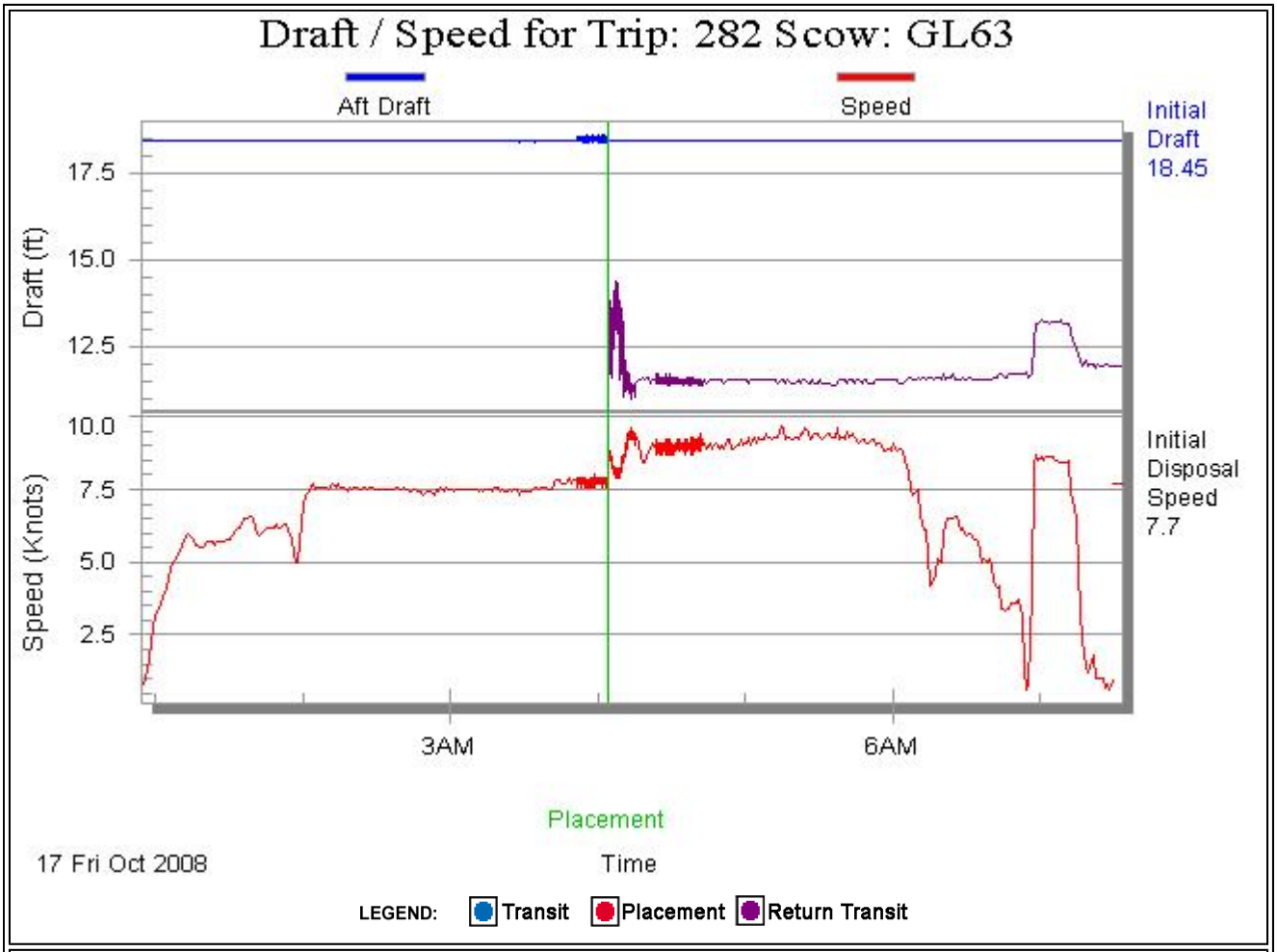

Trip Information

Trip #:	282
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	10/17/2008 00:54:20
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/17/2008 04:04:12	**Time:**	10/17/2008 04:04:28
Latitude:	42.427885	**Latitude:**	42.427993
Longitude:	-70.579514	**Longitude:**	-70.578743
Aft Draft:	18.45 ft	**Aft Draft:**	12.42 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101708_121555

2008 Boston Harbor Maintenance Dredging
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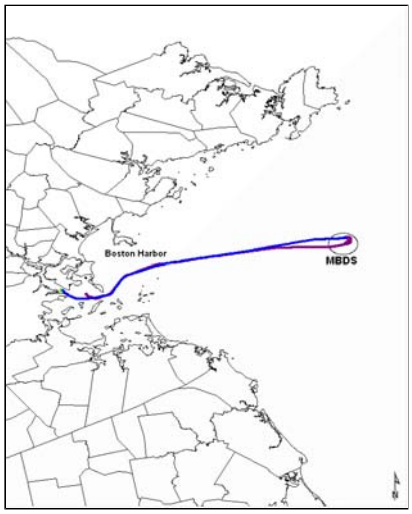
Trip Information:

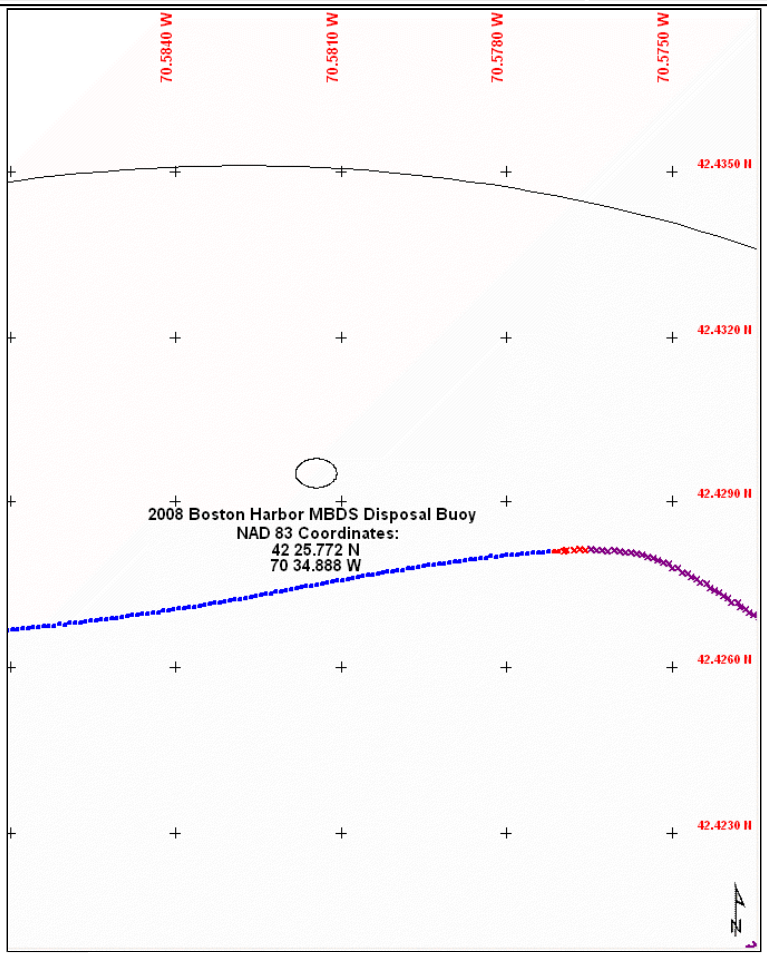
Trip #:	283
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/17/2008 08:22:08
Init Aft Draft:	21.57 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	10/17/2008 11:23:42	10/17/2008 11:23:54
Lat:	42.428099	42.428116
Long:	-70.577150	-70.576573
Aft Draft:	20.74 ft	11.99 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/17/2008 8:22:08 AM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 101708_152734

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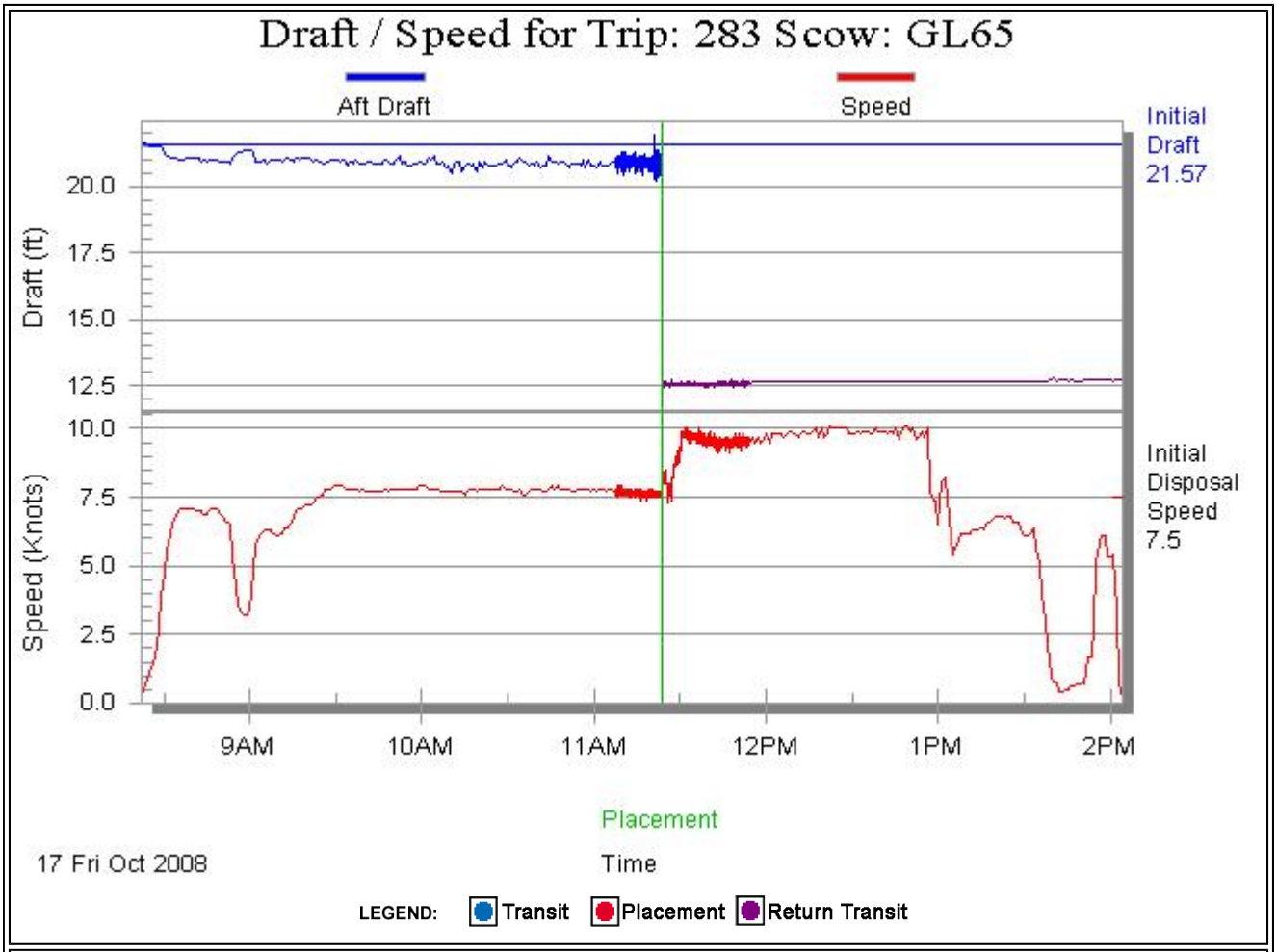

Trip Information

Trip #:	283
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/17/2008 08:22:08
Init Aft Draft:	21.57 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/17/2008 11:23:42	**Time:**	10/17/2008 11:23:54
Latitude:	42.428099	**Latitude:**	42.428116
Longitude:	-70.577150	**Longitude:**	-70.576573
Aft Draft:	20.74 ft	**Aft Draft:**	11.99 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 101708_152734

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

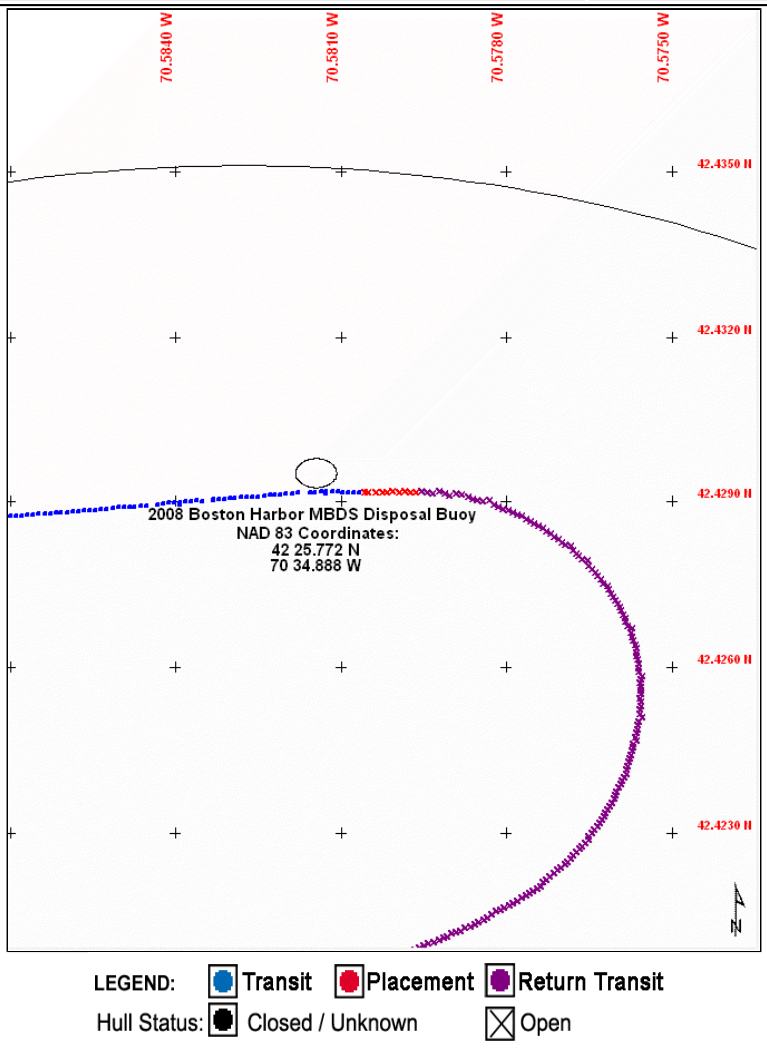
Trip #:	284
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/17/2008 17:14:48
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/17/2008 19:57:16	**Time:**	10/17/2008 19:57:34
Lat:	42.429170	**Lat:**	42.429167
Long:	-70.580579	**Long:**	-70.579632
Aft Draft:	18.45 ft	**Aft Draft:**	12.97 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/17/2008 5:14:48 PM (Local)
Wave Height: 3.0 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 102008_110505

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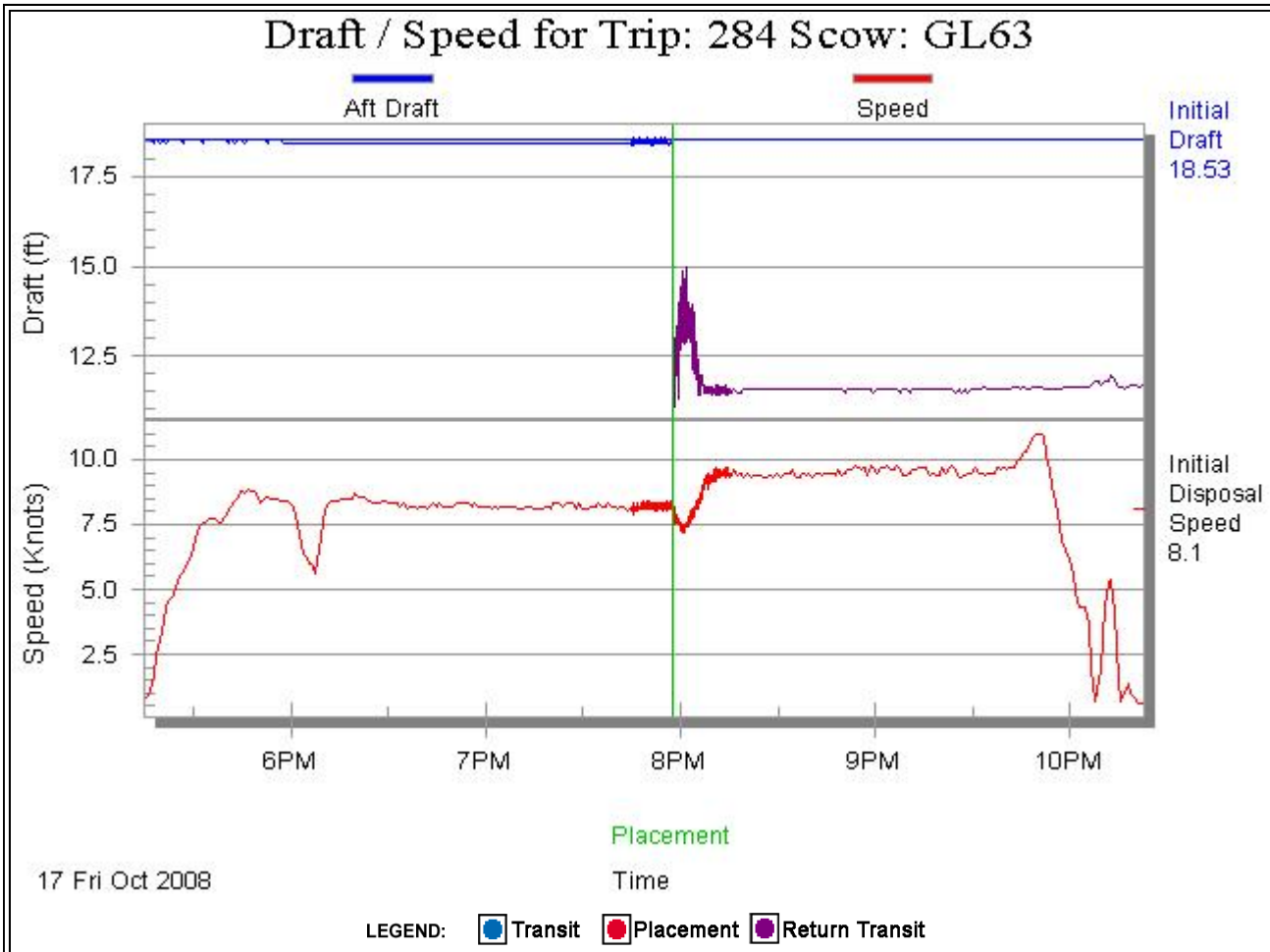

Trip Information

Trip #:	284
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/17/2008 17:14:48
Init Aft Draft:	18.53 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/17/2008 19:57:16	**Time:**	10/17/2008 19:57:34
Latitude:	42.429170	**Latitude:**	42.429167
Longitude:	-70.580579	**Longitude:**	-70.579632
Aft Draft:	18.45 ft	**Aft Draft:**	12.97 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 102008_110505

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Trip Information:

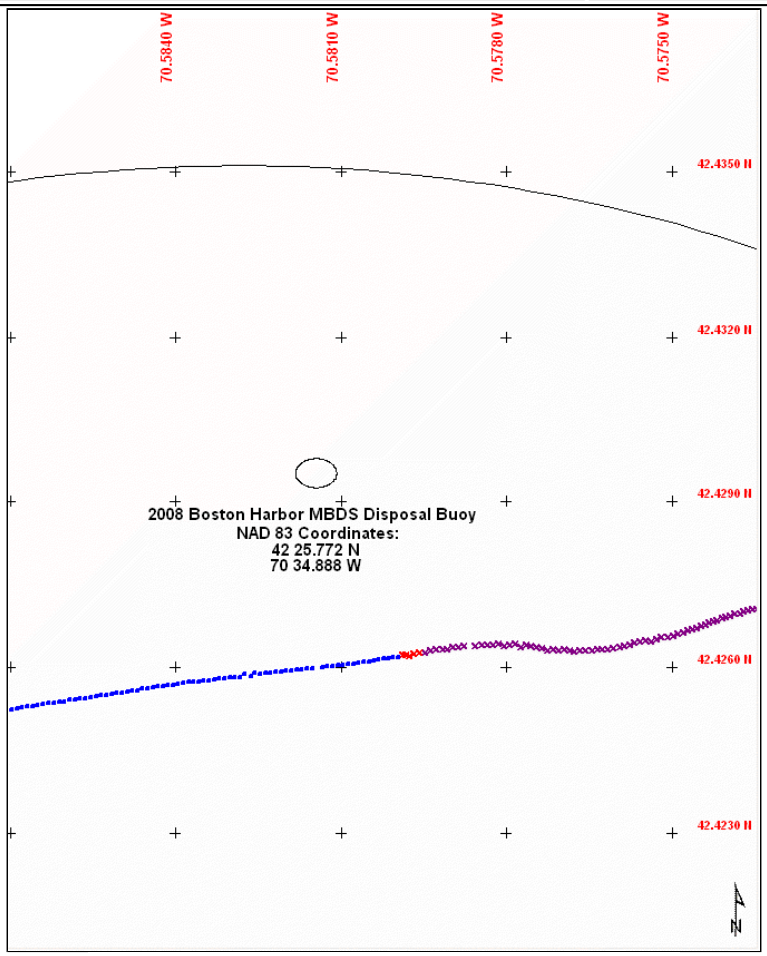
Trip #:	285
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	10/18/2008 03:28:29
Init Aft Draft:	22.48 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/18/2008 06:26:07	**Time:**	10/18/2008 06:26:13
Lat:	42.426226	**Lat:**	42.426272
Long:	-70.579871	**Long:**	-70.579577
Aft Draft:	21.35 ft	**Aft Draft:**	11.92 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/18/2008 3:28:29 AM (Local)
Wave Height: 5.6 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 102008_110523

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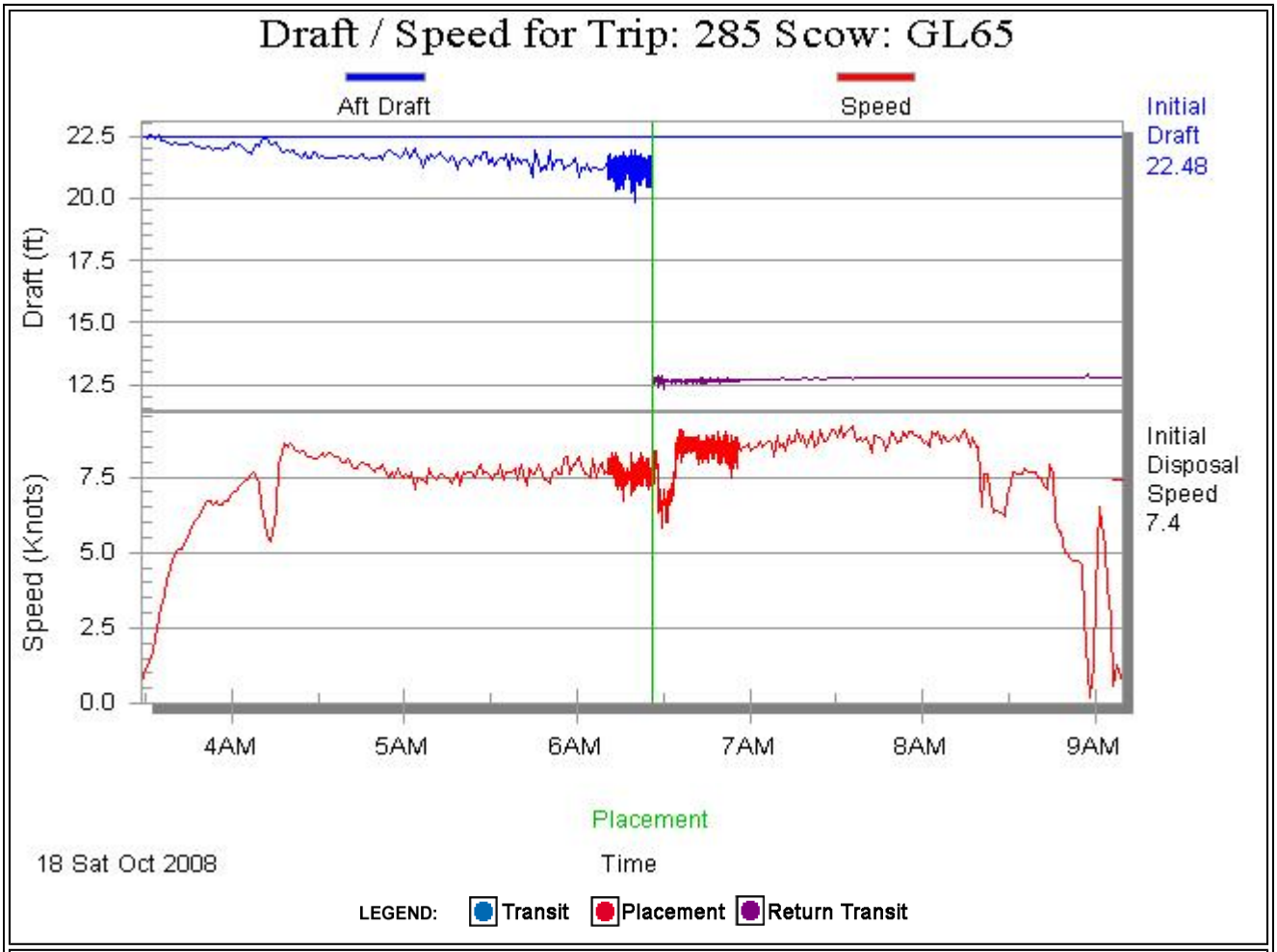


Trip Information

Trip #:	285
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	10/18/2008 03:28:29
Init Aft Draft:	22.48 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	10/18/2008 06:26:07	**Time:**	10/18/2008 06:26:13
Latitude:	42.426226	**Latitude:**	42.426272
Longitude:	-70.579871	**Longitude:**	-70.579577
Aft Draft:	21.35 ft	**Aft Draft:**	11.92 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 102008_110523

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

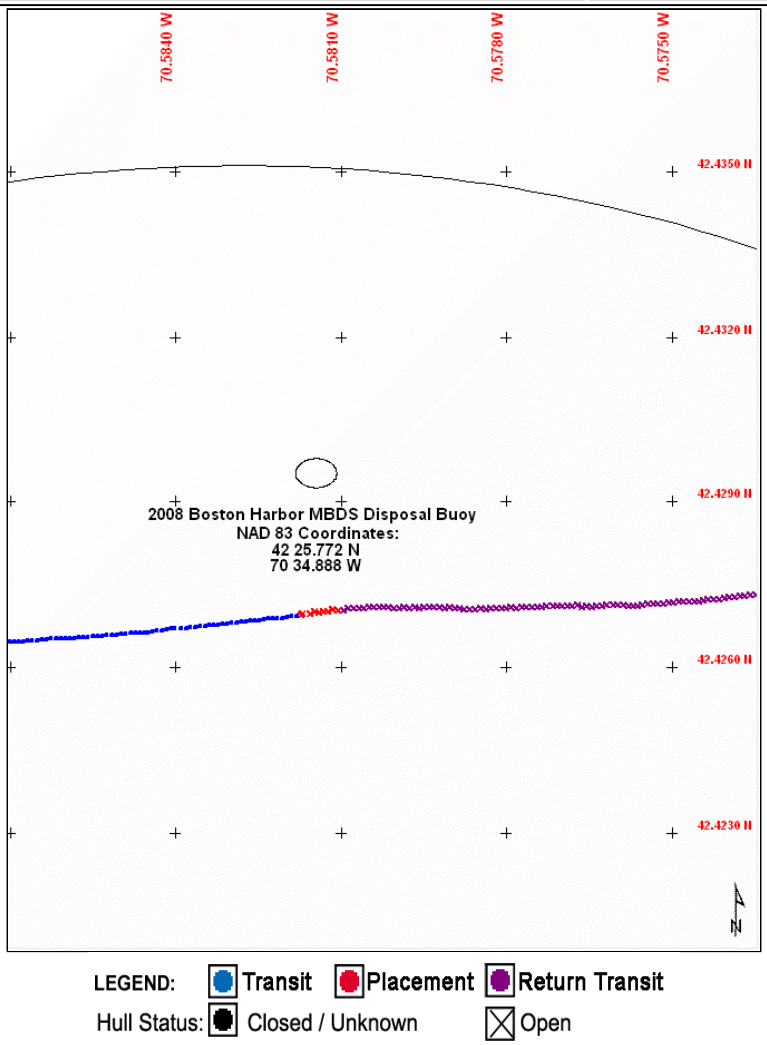
Trip #:	286
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	10/18/2008 11:25:34
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/18/2008 15:11:24	**Time:**	10/18/2008 15:11:40
Lat:	42.426949	**Lat:**	42.427035
Long:	-70.581735	**Long:**	-70.581071
Aft Draft:	18.61 ft	**Aft Draft:**	12.66 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/18/2008 11:25:34 AM (Local)
Wave Height: 5.6 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 102008_110546

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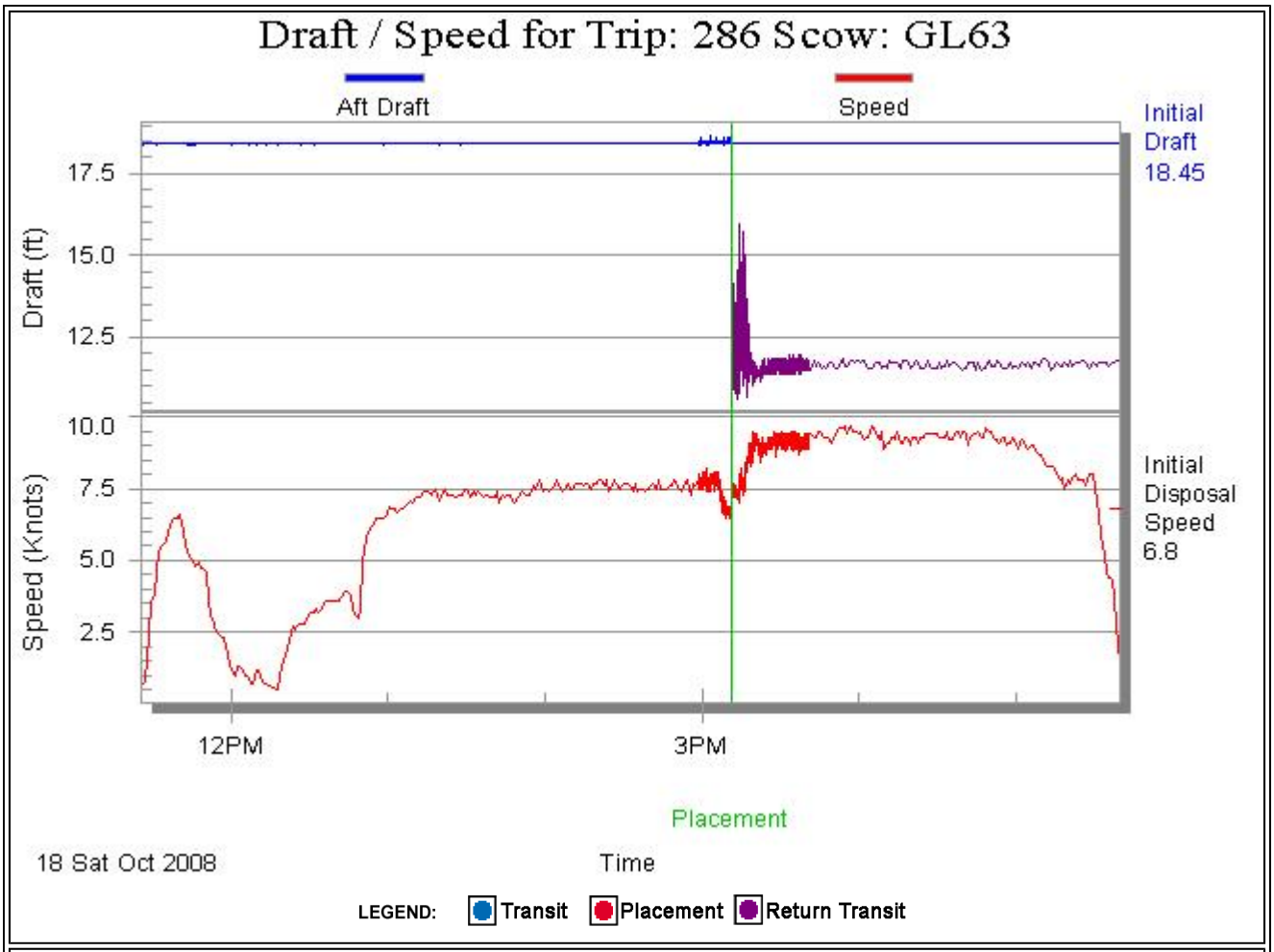

Trip Information

Trip #:	286
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5500 cu yd
Start Time:	10/18/2008 11:25:34
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	10/18/2008 15:11:24
Latitude:	42.426949
Longitude:	-70.581735
Aft Draft:	18.61 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	10/18/2008 15:11:40
Latitude:	42.427035
Longitude:	-70.581071
Aft Draft:	12.66 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 102008_110546

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Trip Information:

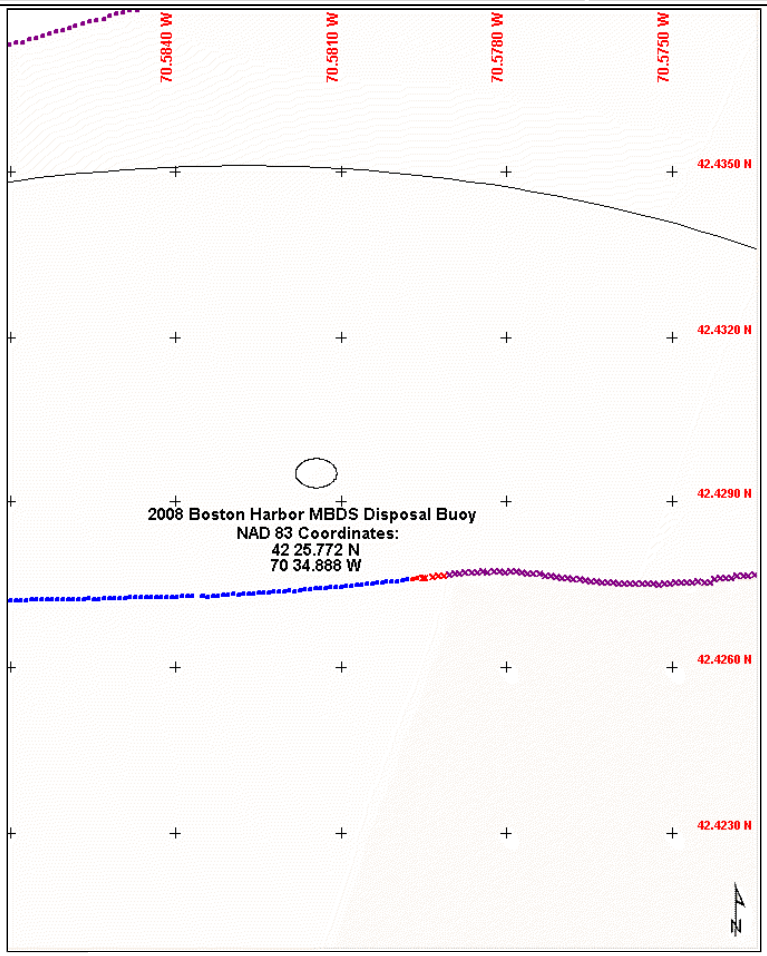
Trip #:	287
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/18/2008 22:08:23
Init Aft Draft:	21.42 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/19/2008 01:08:01	**Time:**	10/19/2008 01:08:13
Lat:	42.427599	**Lat:**	42.427658
Long:	-70.579705	**Long:**	-70.579138
Aft Draft:	20.52 ft	**Aft Draft:**	11.76 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/18/2008 10:08:23 PM (Local)
Wave Height: 4.3 ft **Dominant Wave Period:** 6.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 102008_164136

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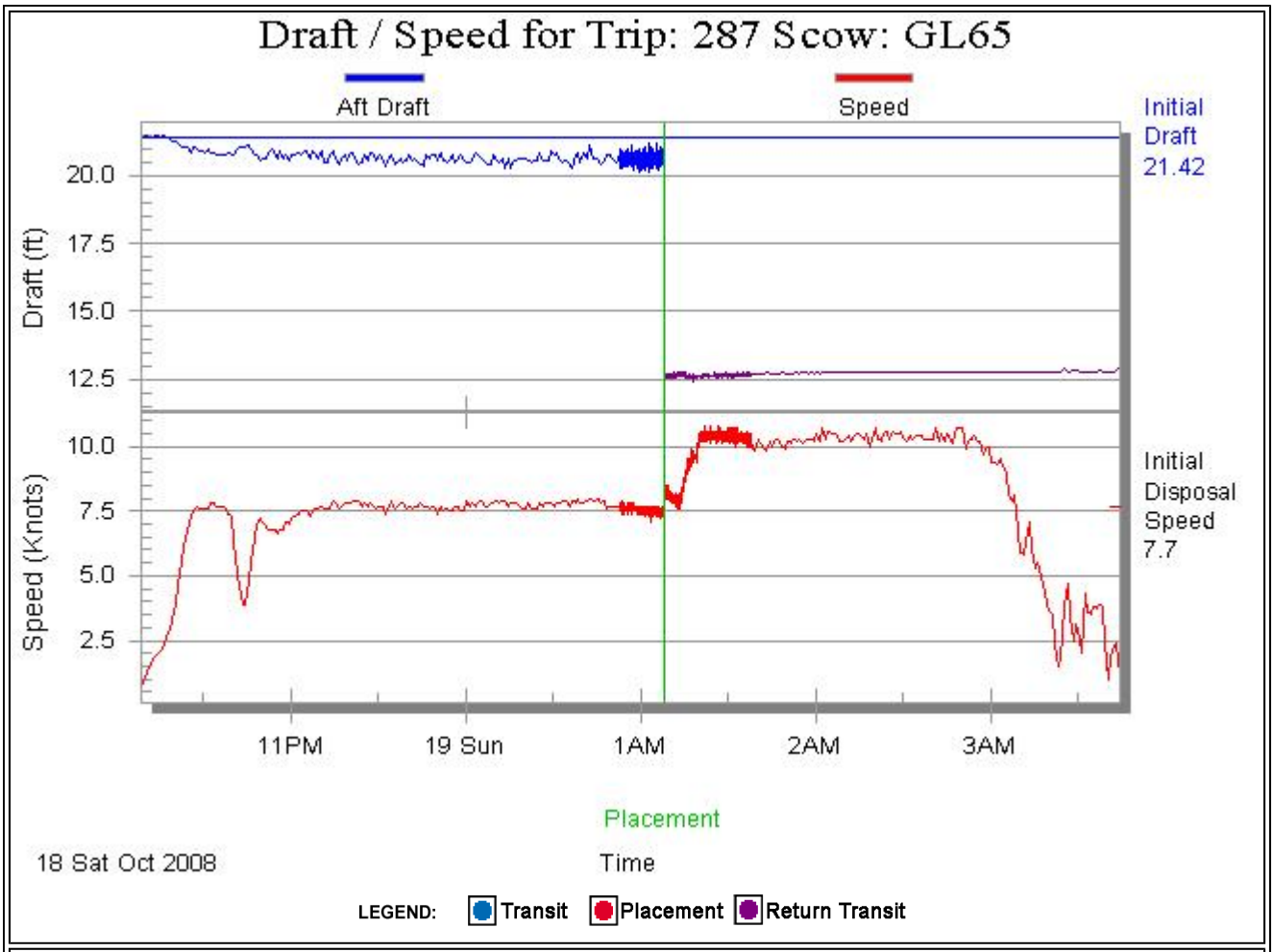

Trip Information

Trip #:	287
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5700 cu yd
Start Time:	10/18/2008 22:08:23
Init Aft Draft:	21.42 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	10/19/2008 01:08:01	**Time:**	10/19/2008 01:08:13
Latitude:	42.427599	**Latitude:**	42.427658
Longitude:	-70.579705	**Longitude:**	-70.579138
Aft Draft:	20.52 ft	**Aft Draft:**	11.76 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 102008_164136

2008 Boston Harbor Maintenance Dredging
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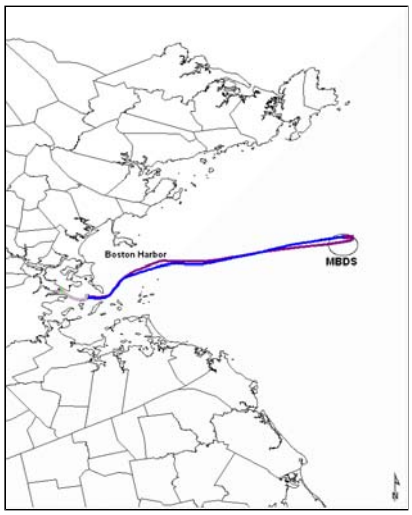
Trip Information:

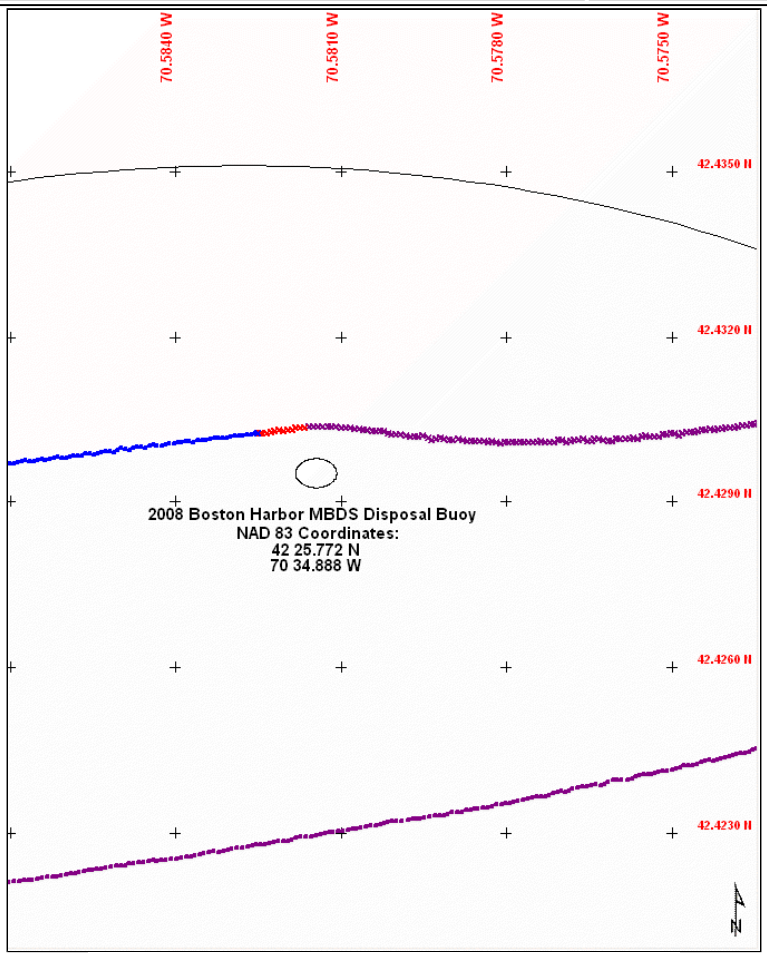
Trip #:	288
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	10/21/2008 07:18:57
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	10/21/2008 10:26:43	10/21/2008 10:27:04
Lat:	42.430268	42.430357
Long:	-70.582474	-70.581666
Aft Draft:	18.45 ft	12.02 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/21/2008 7:18:57 AM (Local)
Wave Height: 5.6 ft **Dominant Wave Period:** 13.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 102208_140151

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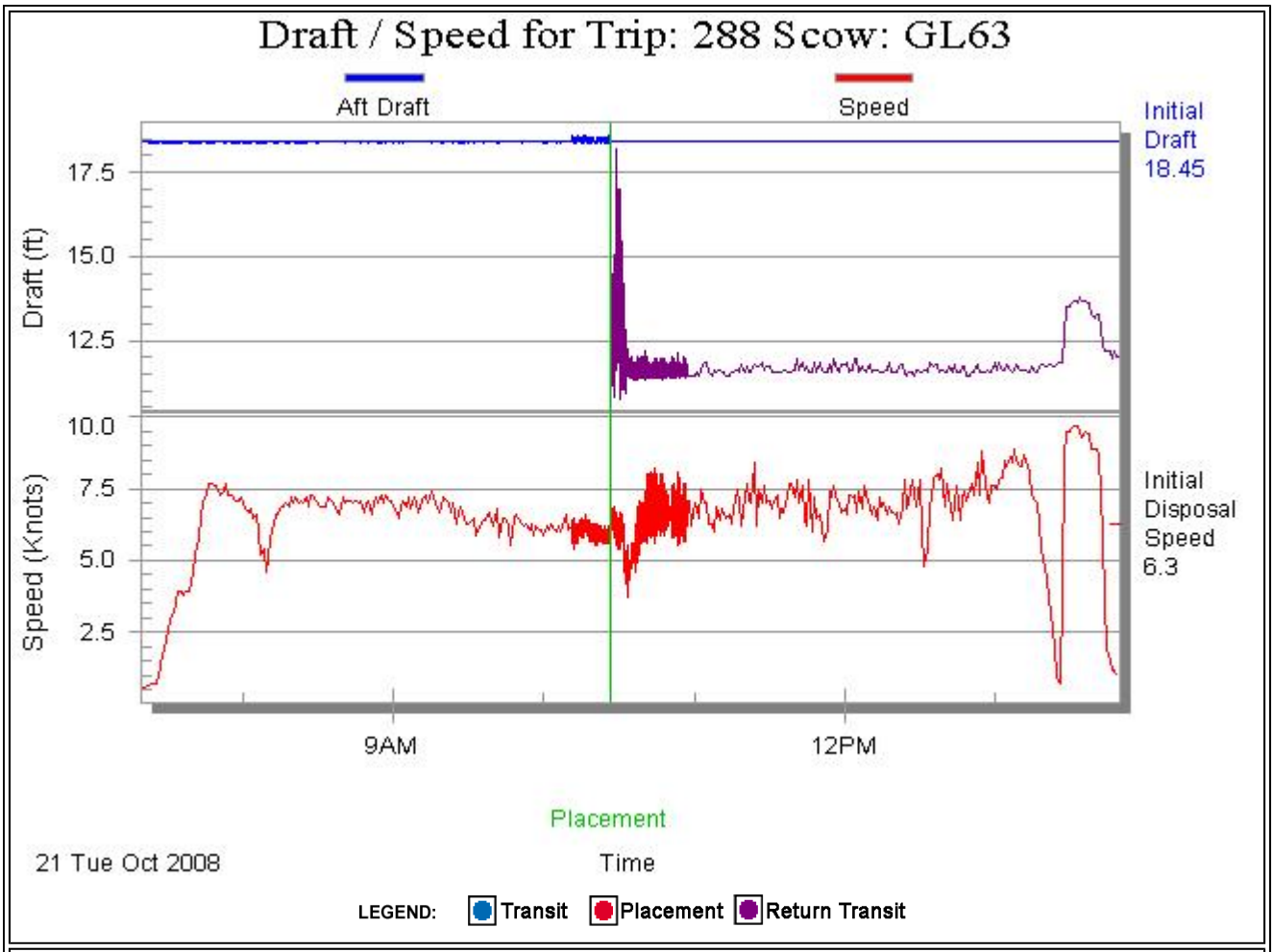

Trip Information

Trip #:	288
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6000 cu yd
Start Time:	10/21/2008 07:18:57
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	10/21/2008 10:26:43	**Time:**	10/21/2008 10:27:04
Latitude:	42.430268	**Latitude:**	42.430357
Longitude:	-70.582474	**Longitude:**	-70.581666
Aft Draft:	18.45 ft	**Aft Draft:**	12.02 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 102208_140151

2008 Boston Harbor Maintenance Dredging
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Trip Information:

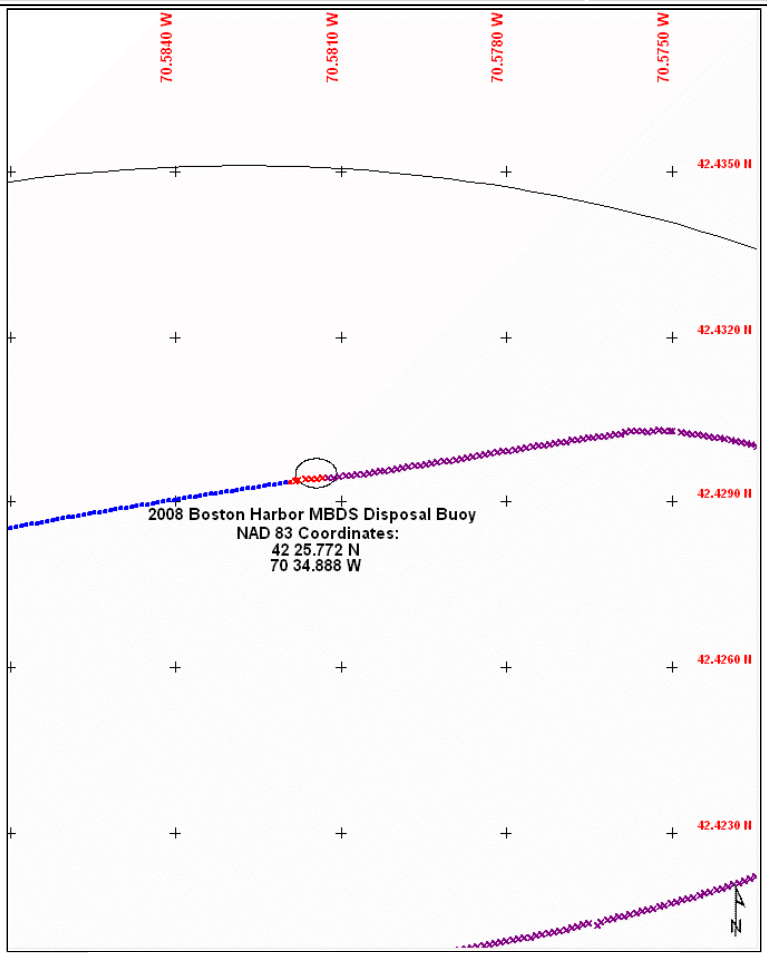
Trip #:	289
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6276 cu yd
Start Time:	10/31/2008 21:51:57
Init Aft Draft:	21.65 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	11/1/2008 00:36:11	11/1/2008 00:36:23
Lat:	42.429359	42.429446
Long:	-70.581928	-70.581349
Aft Draft:	20.82 ft	10.63 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 10/31/2008 9:51:57 PM (Local)
Wave Height: 2.3 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110308_171656

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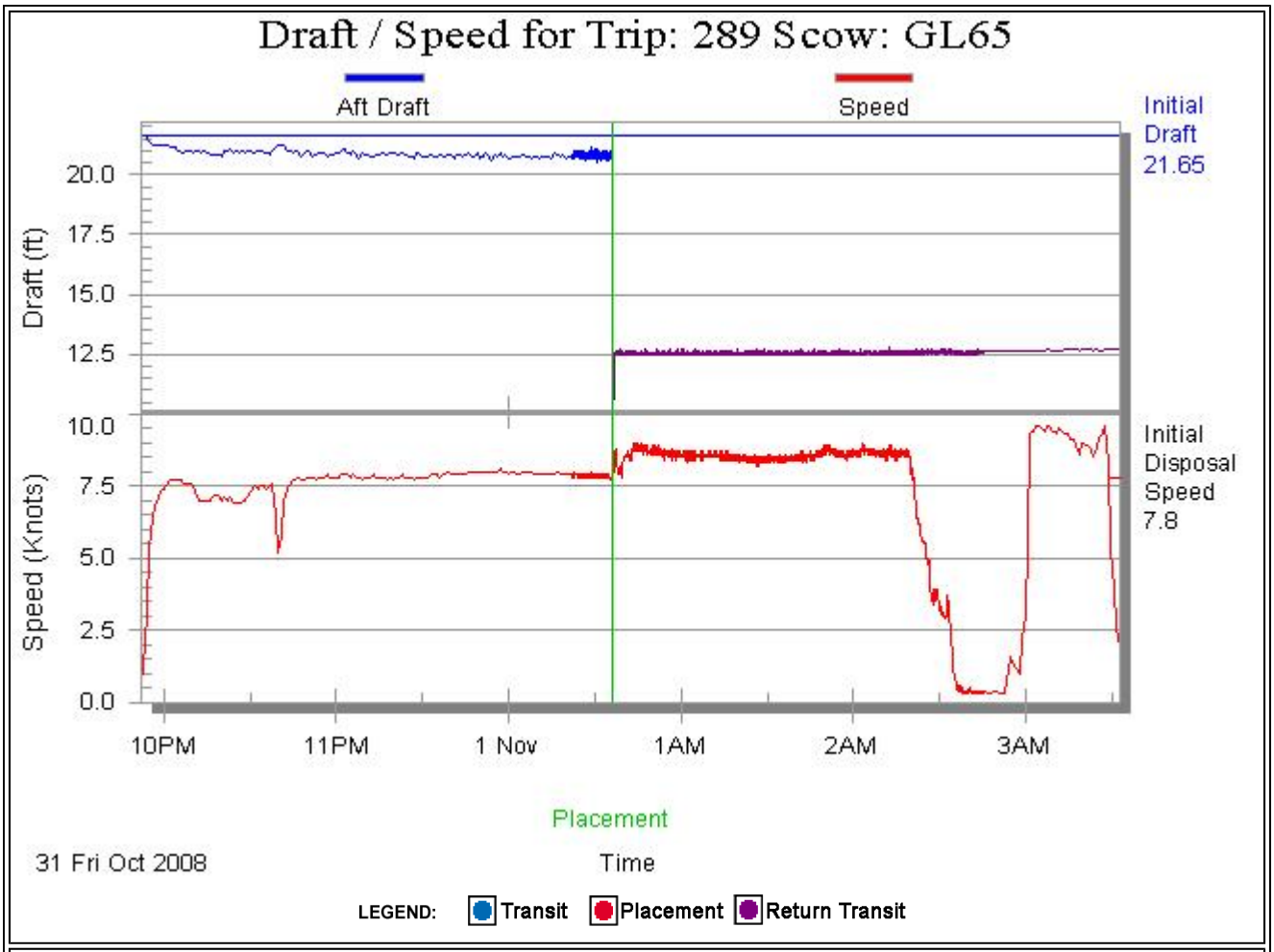

Trip Information

Trip #:	289
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6276 cu yd
Start Time:	10/31/2008 21:51:57
Init Aft Draft:	21.65 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/1/2008 00:36:11	**Time:**	11/1/2008 00:36:23
Latitude:	42.429359	**Latitude:**	42.429446
Longitude:	-70.581928	**Longitude:**	-70.581349
Aft Draft:	20.82 ft	**Aft Draft:**	10.63 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110308_171656

2008 Boston Harbor Maintenance Dredging
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Trip Information:

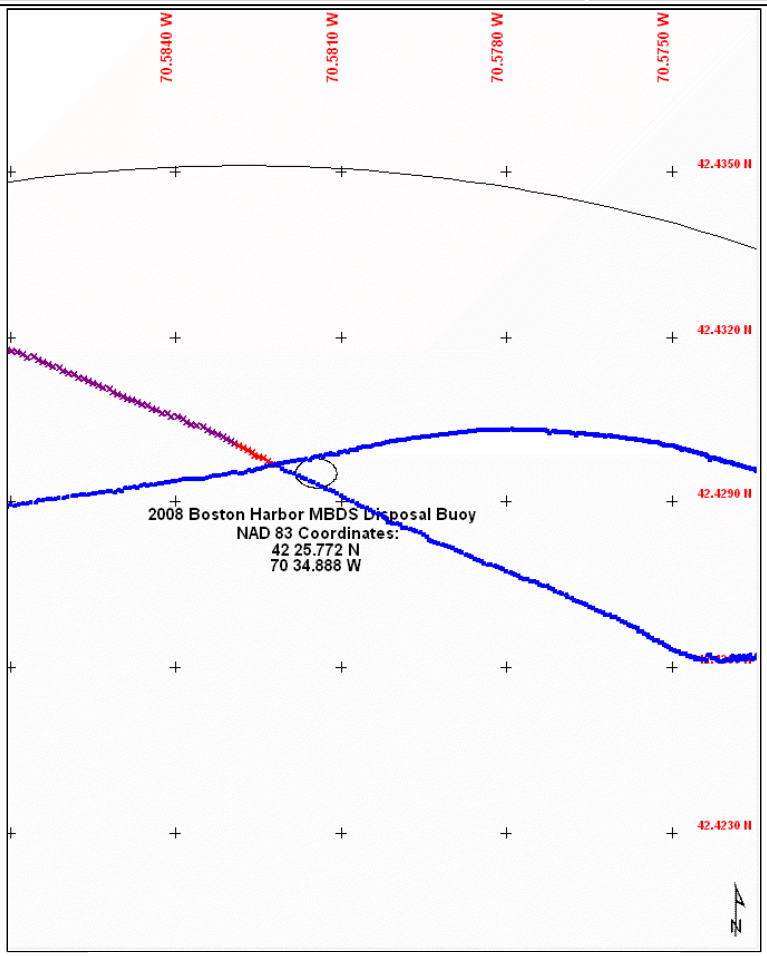
Trip #:	290
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6276 cu yd
Start Time:	11/1/2008 20:02:53
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/1/2008 22:16:17	**Time:**	11/1/2008 22:16:35
Lat:	42.429701	**Lat:**	42.430035
Long:	-70.582212	**Long:**	-70.582854
Aft Draft:	18.45 ft	**Aft Draft:**	11.78 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/1/2008 8:02:53 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110308_093501

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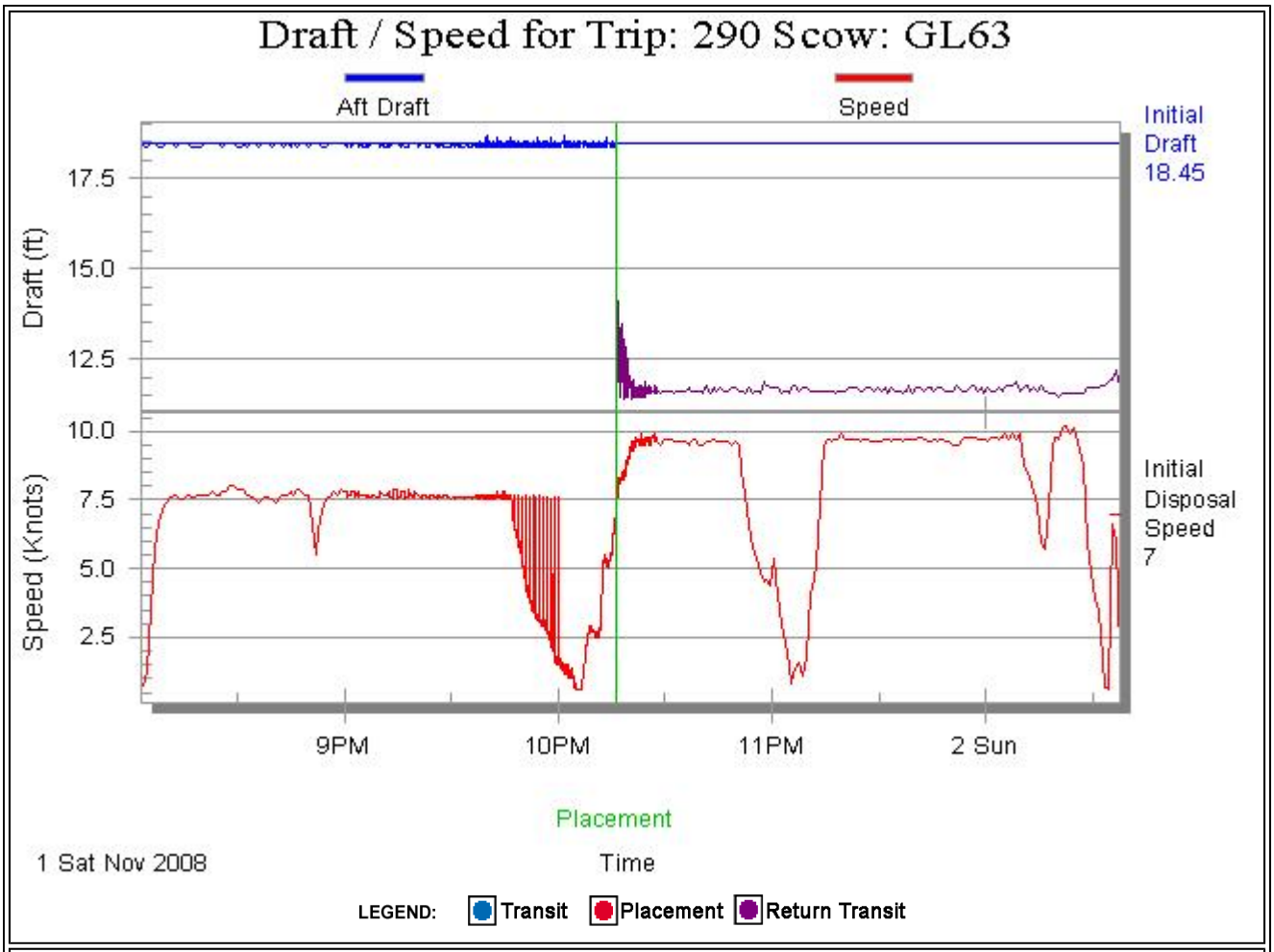

Trip Information

Trip #:	290
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6276 cu yd
Start Time:	11/1/2008 20:02:53
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	11/1/2008 22:16:17	**Time:**	11/1/2008 22:16:35
Latitude:	42.429701	**Latitude:**	42.430035
Longitude:	-70.582212	**Longitude:**	-70.582854
Aft Draft:	18.45 ft	**Aft Draft:**	11.78 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110308_093501

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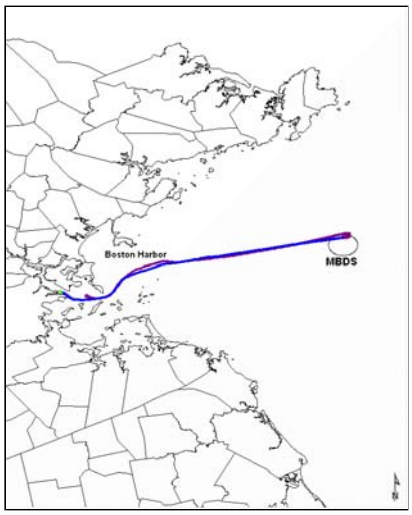
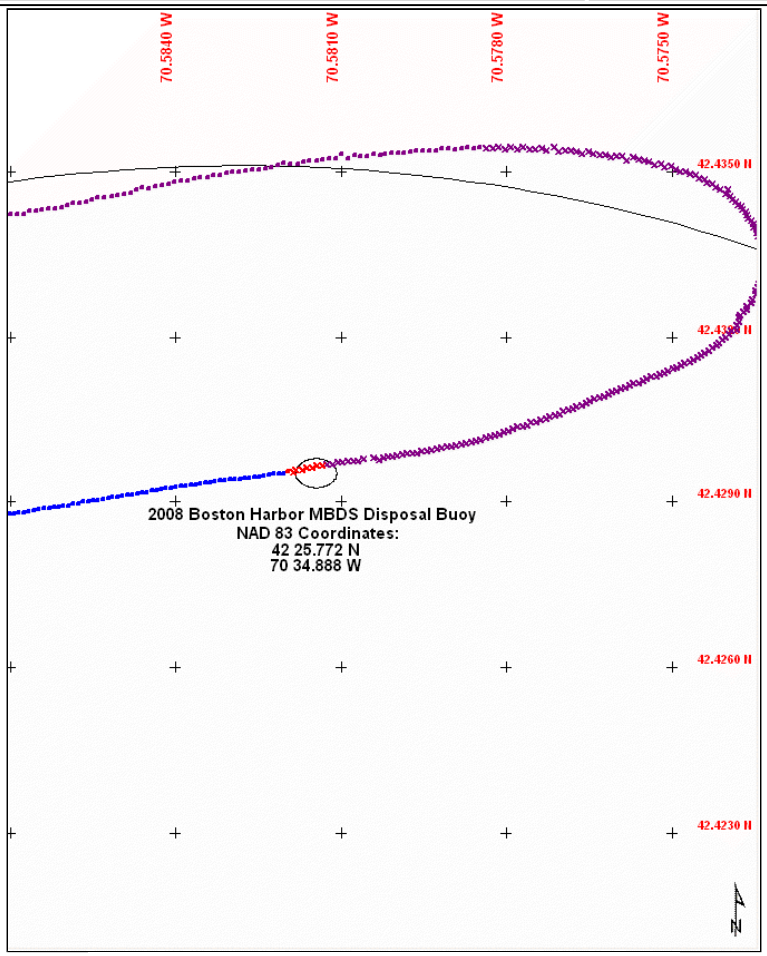
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	291				
Tug:	Lemmerhirt	**Time:**	11/2/2008 12:06:58	**Time:**	11/2/2008 12:07:12
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.429569	**Lat:**	42.429674
Type:	Split Hull Scow	**Long:**	-70.581972	**Long:**	-70.581352
Technique:	Bottom Dump				
Bin Volume:	5900 cu yd				
Start Time:	11/2/2008 09:12:34				
Init Aft Draft:	21.27 ft	**Aft Draft:**	20.22 ft	**Aft Draft:**	12.44 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/2/2008 9:12:34 AM (Local)
Wave Height: 3.9 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110308_172223

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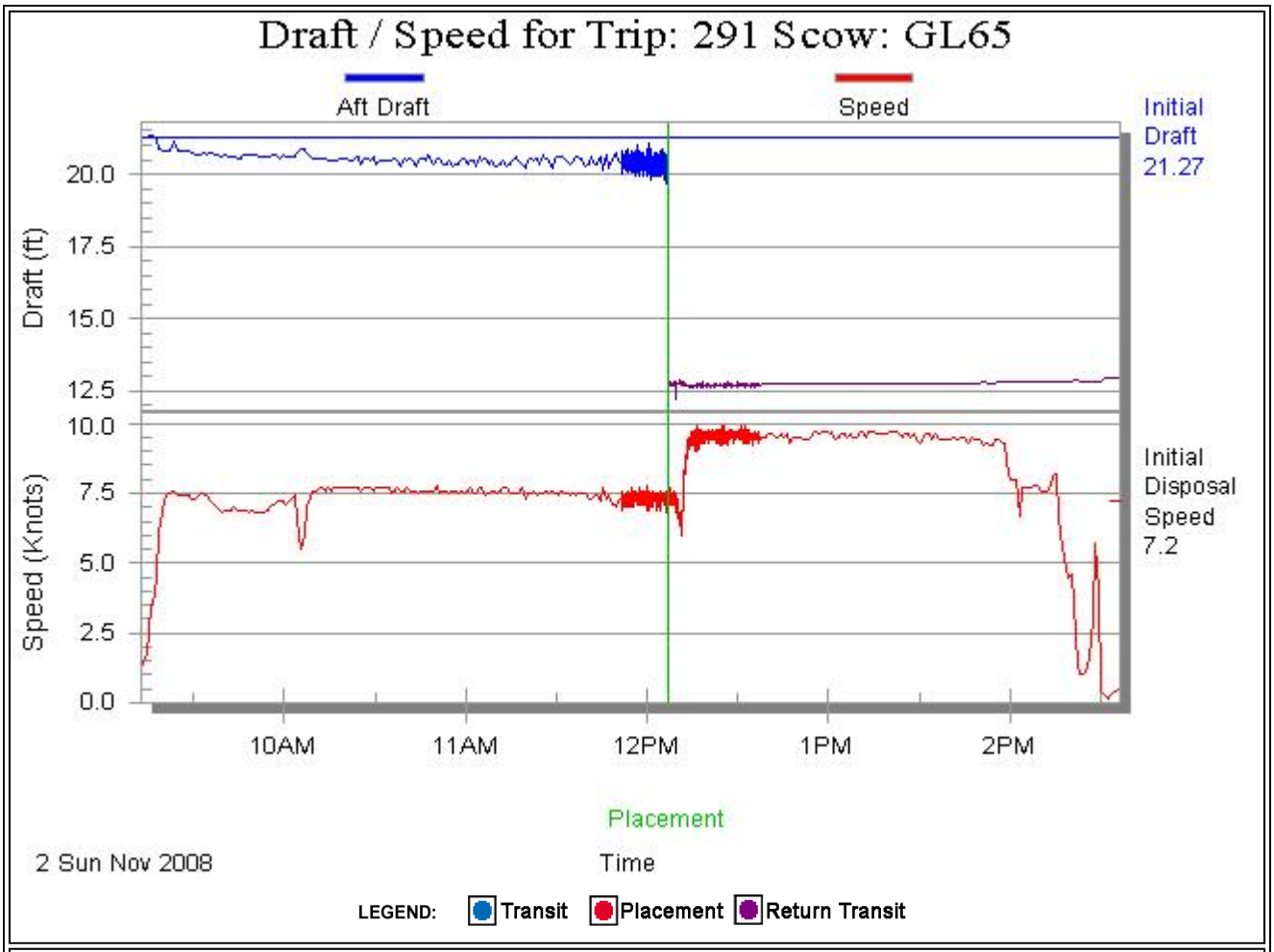

Trip Information

Trip #:	291
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	11/2/2008 09:12:34
Init Aft Draft:	21.27 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	11/2/2008 12:06:58
Latitude:	42.429569
Longitude:	-70.581972
Aft Draft:	20.22 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	11/2/2008 12:07:12
Latitude:	42.429674
Longitude:	-70.581352
Aft Draft:	12.44 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110308_172223

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Trip Information:

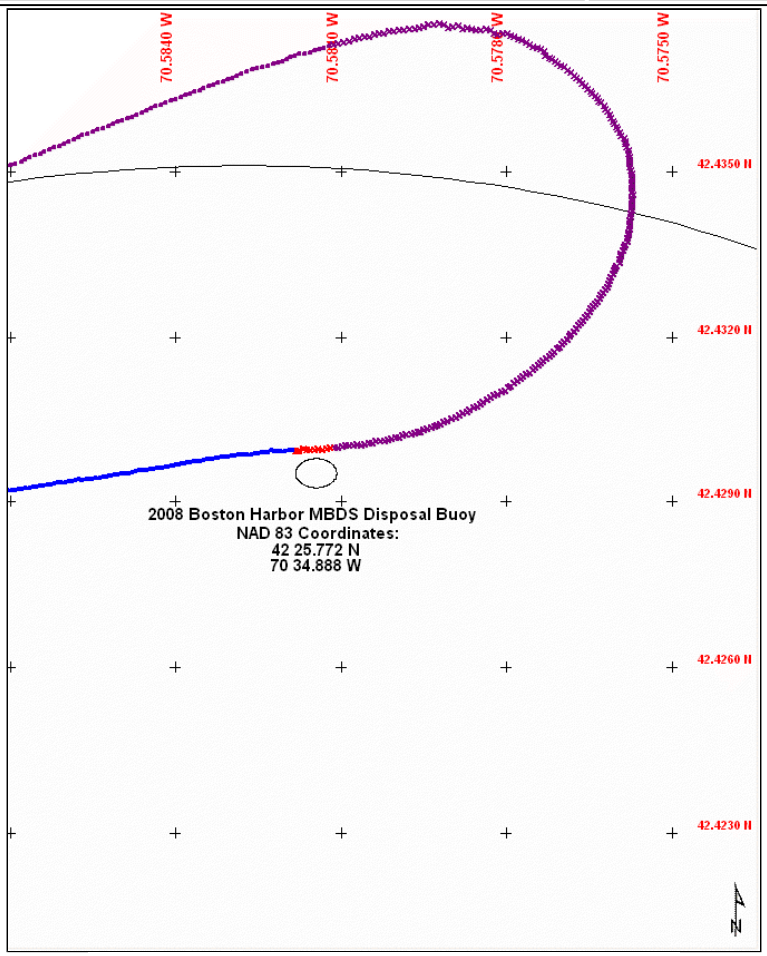
Trip #:	292
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5579 cu yd
Start Time:	11/2/2008 21:57:35
Init Aft Draft:	18.37 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/3/2008 00:47:24	**Time:**	11/3/2008 00:47:42
Lat:	42.429941	**Lat:**	42.429999
Long:	-70.581829	**Long:**	-70.581202
Aft Draft:	18.45 ft	**Aft Draft:**	12.74 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/2/2008 9:57:35 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 5.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110308_103252

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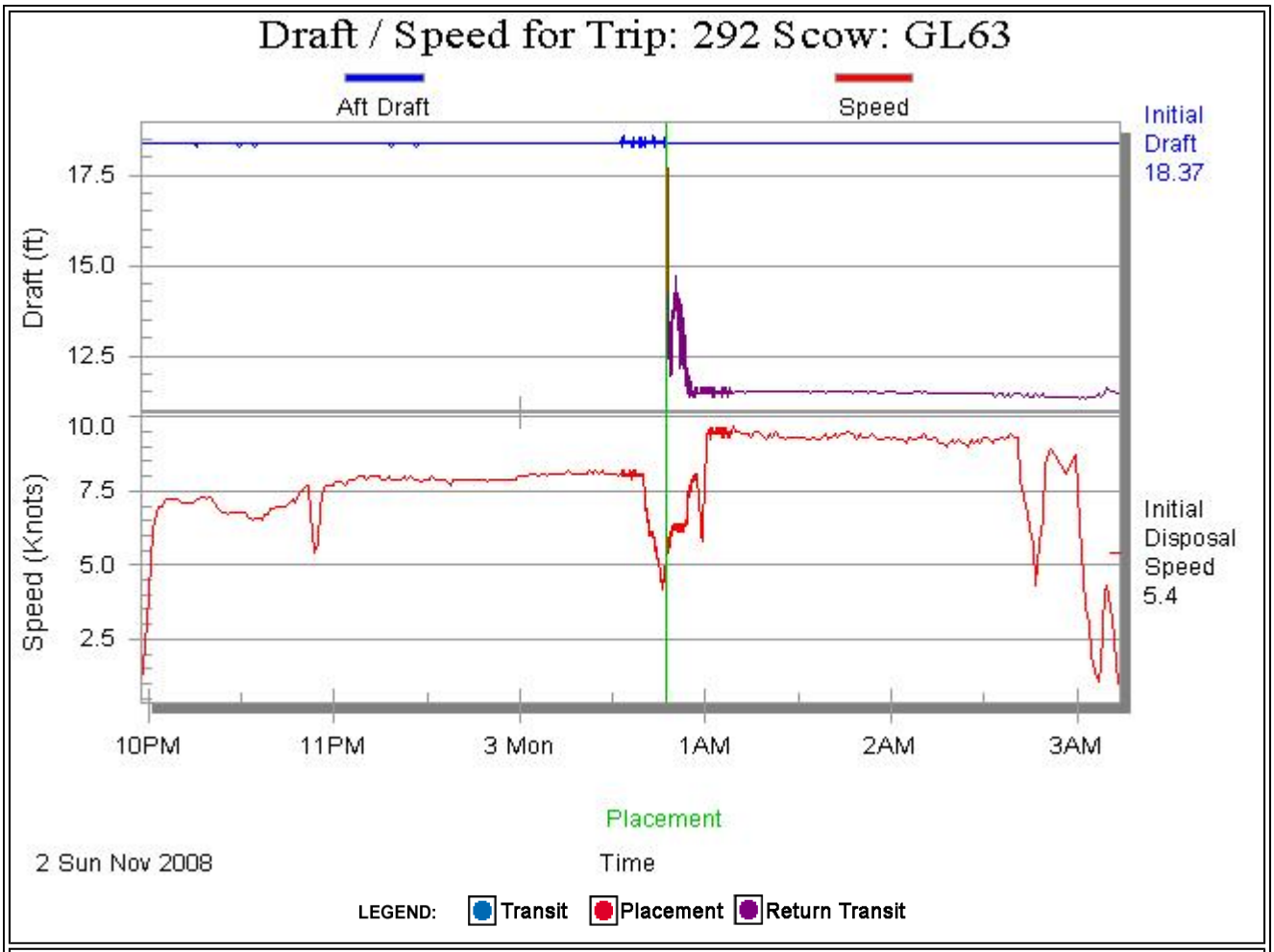

Trip Information

Trip #:	292
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5579 cu yd
Start Time:	11/2/2008 21:57:35
Init Aft Draft:	18.37 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	11/3/2008 00:47:24
Latitude:	42.429941
Longitude:	-70.581829
Aft Draft:	18.45 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	11/3/2008 00:47:42
Latitude:	42.429999
Longitude:	-70.581202
Aft Draft:	12.74 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110308_103252

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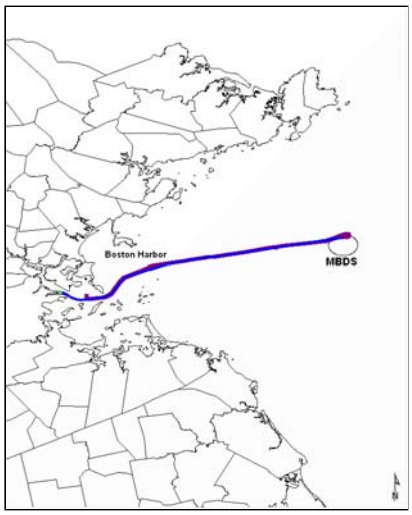
Trip Information:

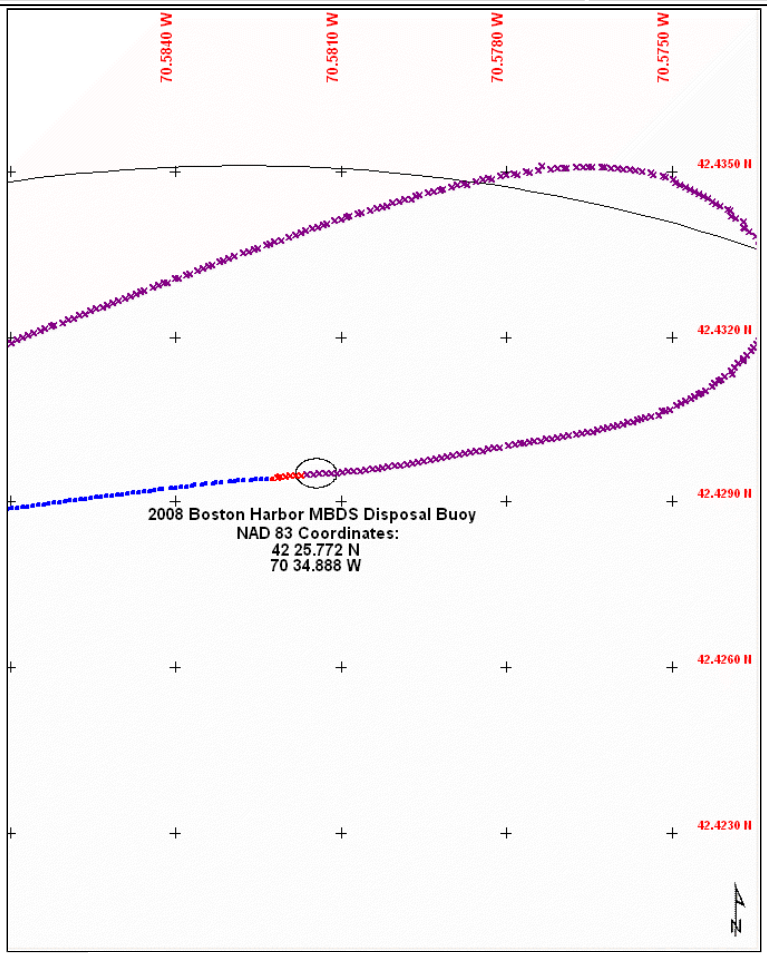
Trip #:	293
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6256 cu yd
Start Time:	11/3/2008 07:12:16
Init Aft Draft:	22.71 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/3/2008 09:55:56	**Time:**	11/3/2008 09:56:07
Lat:	42.429439	**Lat:**	42.429500
Long:	-70.582257	**Long:**	-70.581729
Aft Draft:	21.80 ft	**Aft Draft:**	11.61 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/3/2008 7:12:16 AM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110308_172852

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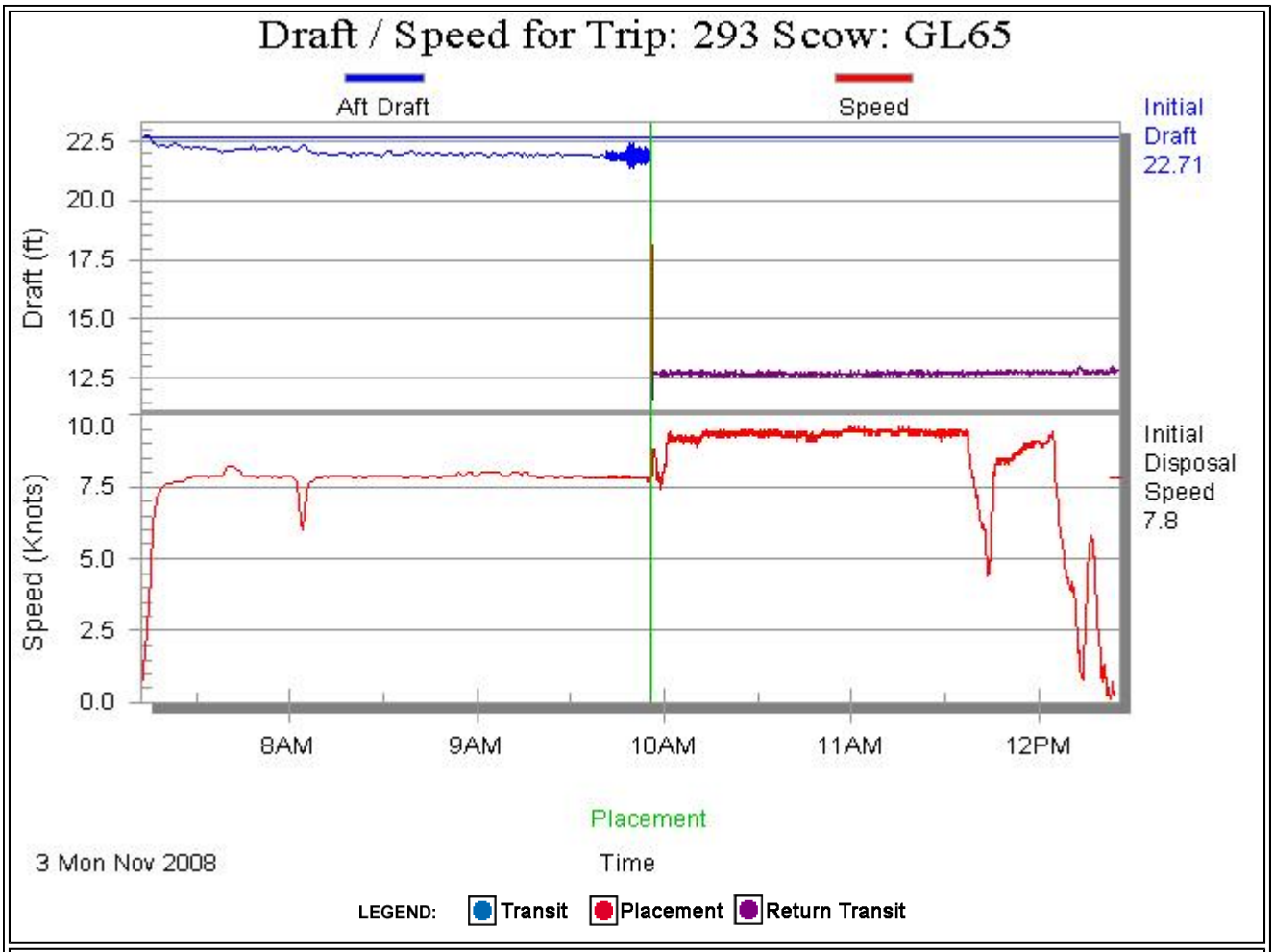

Trip Information

Trip #:	293
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6256 cu yd
Start Time:	11/3/2008 07:12:16
Init Aft Draft:	22.71 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/3/2008 09:55:56	**Time:**	11/3/2008 09:56:07
Latitude:	42.429439	**Latitude:**	42.429500
Longitude:	-70.582257	**Longitude:**	-70.581729
Aft Draft:	21.80 ft	**Aft Draft:**	11.61 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110308_172852

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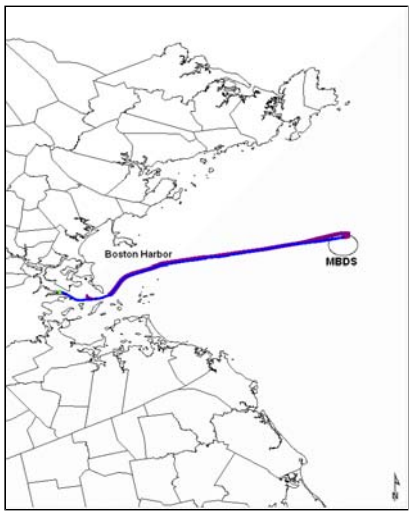
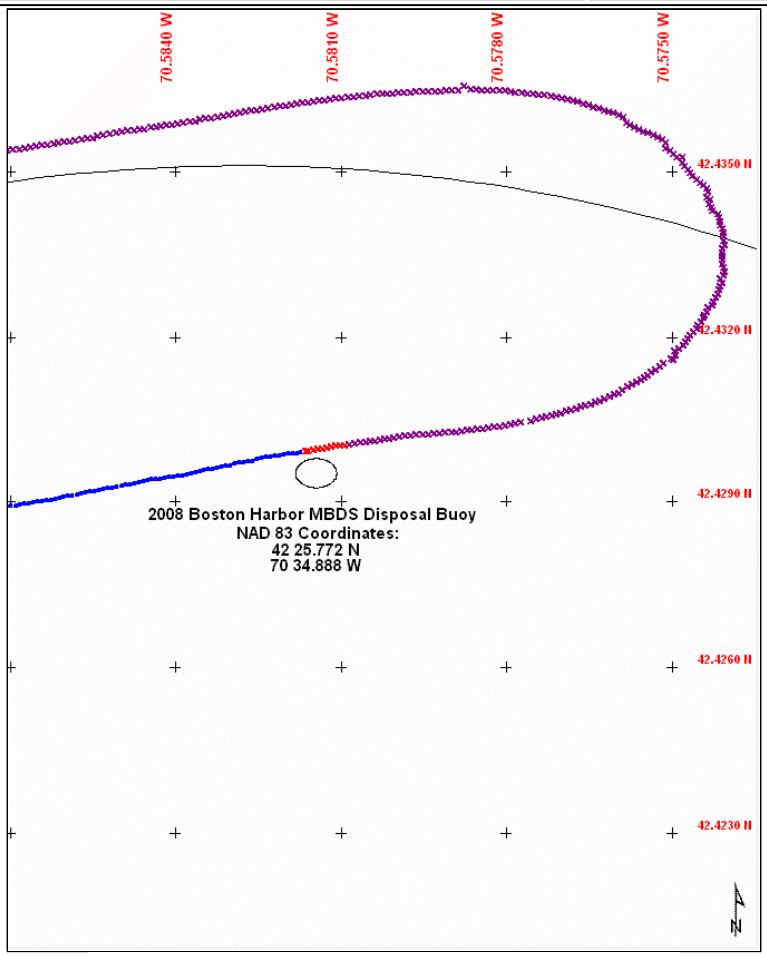
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	294				
Tug:	Lemmerhirt	**Time:**	11/3/2008 19:25:48	**Time:**	11/3/2008 19:26:06
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.429927	**Lat:**	42.430043
Type:	Split Hull Scow	**Long:**	-70.581659	**Long:**	-70.580939
Technique:	Bottom Dump				
Bin Volume:	5872 cu yd				
Start Time:	11/3/2008 16:46:14				
Init Aft Draft:	18.45 ft	**Aft Draft:**	18.37 ft	**Aft Draft:**	12.42 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/3/2008 4:46:14 PM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 4.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110408_092621

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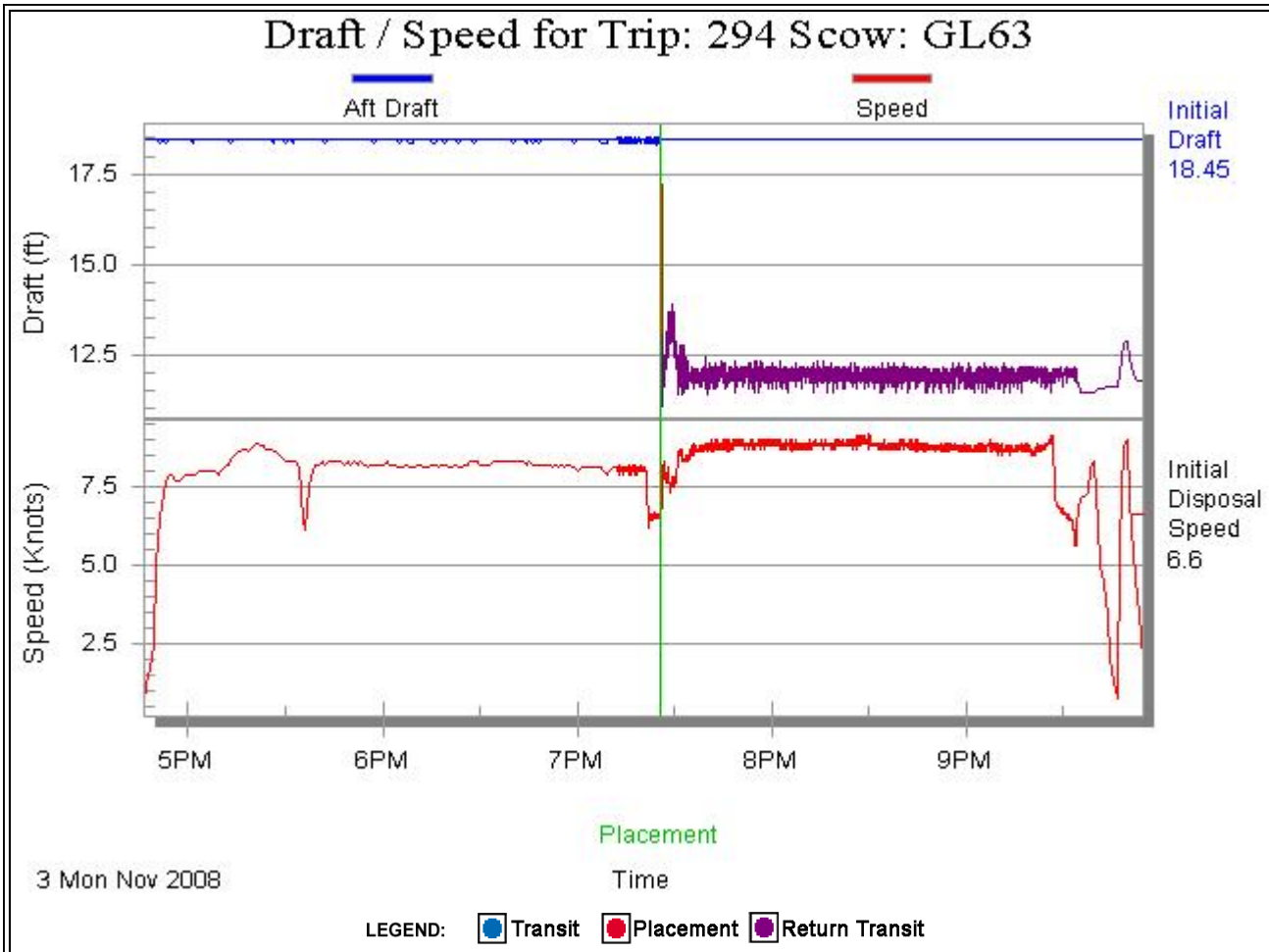

Trip Information

Trip #:	294
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5872 cu yd
Start Time:	11/3/2008 16:46:14
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:

Time:	11/3/2008 19:25:48
Latitude:	42.429927
Longitude:	-70.581659
Aft Draft:	18.37 ft
Fore Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Placement End:

Time:	11/3/2008 19:26:06
Latitude:	42.430043
Longitude:	-70.580939
Aft Draft:	12.42 ft
Forward Draft:	N/A
Aft Bin:	N/A
Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110408_092621

2008 Boston Harbor Maintenance Dredging
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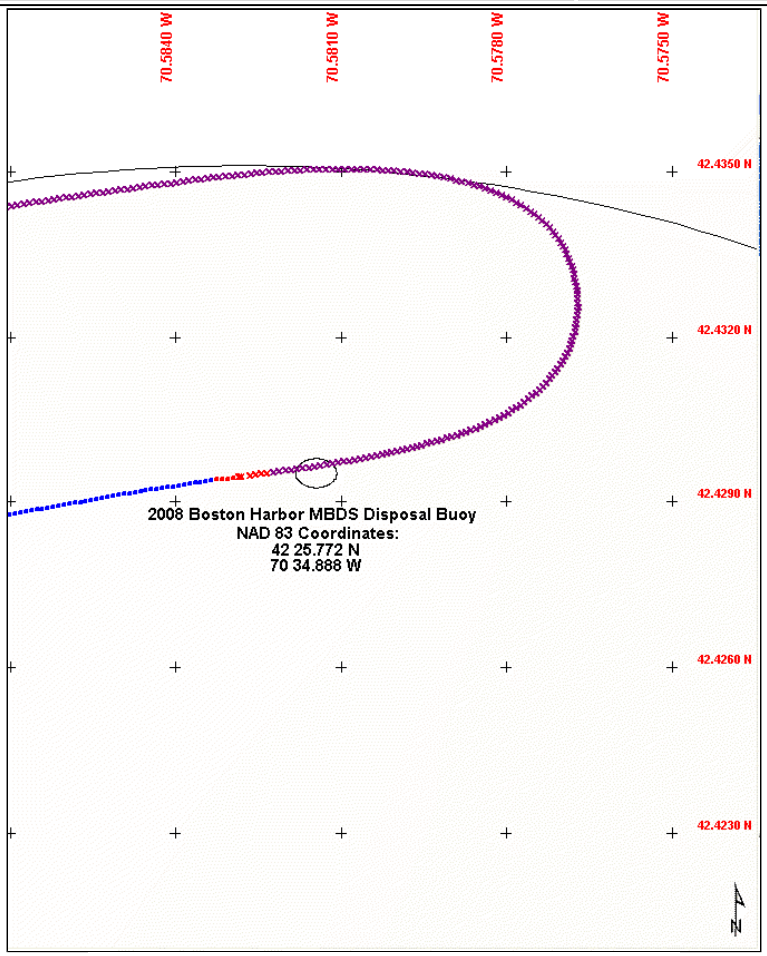
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	295				
Tug:	Lemmerhirt	**Time:**	11/4/2008 07:58:01	**Time:**	11/4/2008 07:58:19
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.429406	**Lat:**	42.429544
Type:	Split Hull Scow	**Long:**	-70.583259	**Long:**	-70.582352
Technique:	Bottom Dump				
Bin Volume:	6074 cu yd				
Start Time:	11/4/2008 05:25:59				
Init Aft Draft:	21.35 ft	**Aft Draft:**	20.52 ft	**Aft Draft:**	12.44 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/4/2008 5:25:59 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL65 returned to the dredge site while Open. The hull status sensor returned to the Closed position after returning to the mooring buoy.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110408_112919

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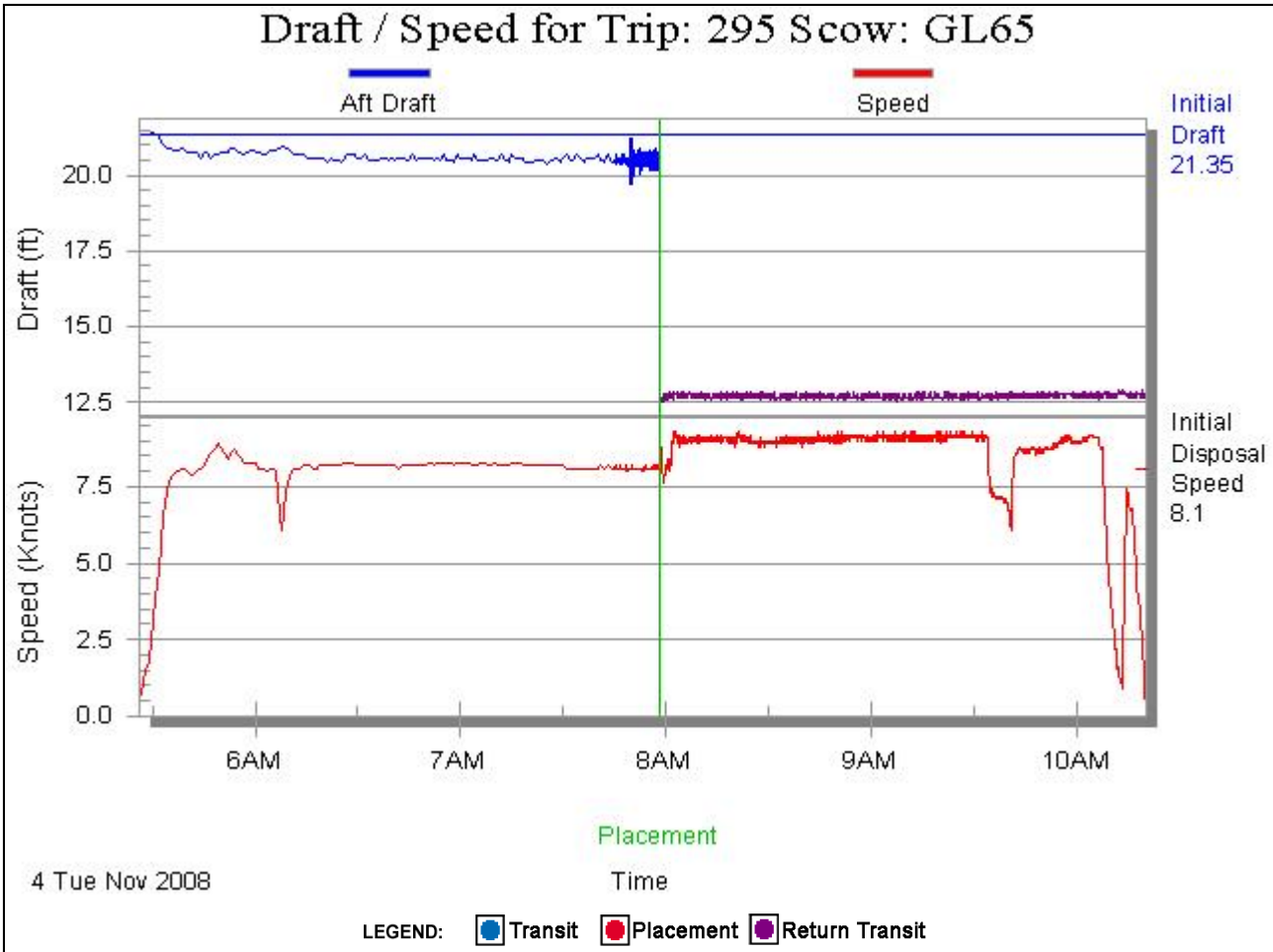

Trip Information

Trip #:	295
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6074 cu yd
Start Time:	11/4/2008 05:25:59
Init Aft Draft:	21.35 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Placement Information:

Placement Start:		Placement End:	
Time:	11/4/2008 07:58:01	**Time:**	11/4/2008 07:58:19
Latitude:	42.429406	**Latitude:**	42.429544
Longitude:	-70.583259	**Longitude:**	-70.582352
Aft Draft:	20.52 ft	**Aft Draft:**	12.44 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. The hull status sensor indicates that the GL65 returned to the dredge site while Open. The hull status sensor returned to the Closed position after returning to the mooring buoy.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110408_112919

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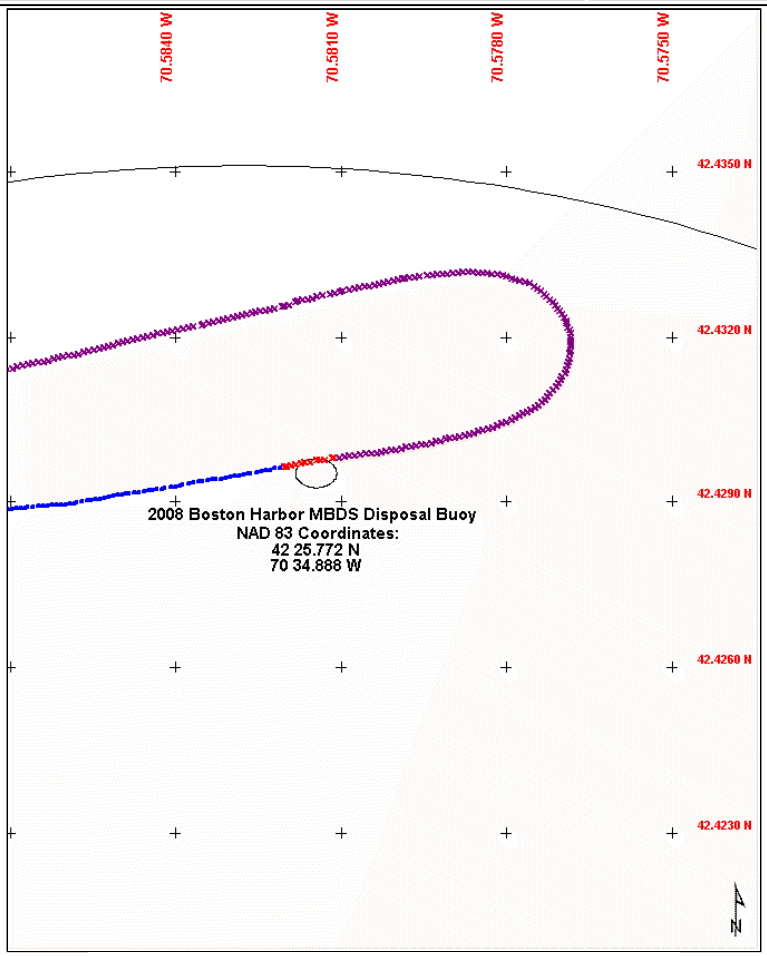
Trip Information:		**Placement Information:**			
		Placement Start:		**Placement End:**	
Trip #:	296				
Tug:	Lemmerhirt	**Time:**	11/4/2008 19:29:50	**Time:**	11/4/2008 19:30:11
Captain(s):	Unknown				
Scow:	GL63	**Lat:**	42.429651	**Lat:**	42.429816
Type:	Split Hull Scow	**Long:**	-70.582028	**Long:**	-70.581136
Technique:	Bottom Dump				
Bin Volume:	6276 cu yd				
Start Time:	11/4/2008 16:51:00				
Init Aft Draft:	18.45 ft	**Aft Draft:**	18.45 ft	**Aft Draft:**	15.04 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/4/2008 4:51:00 PM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 10.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110608_153103

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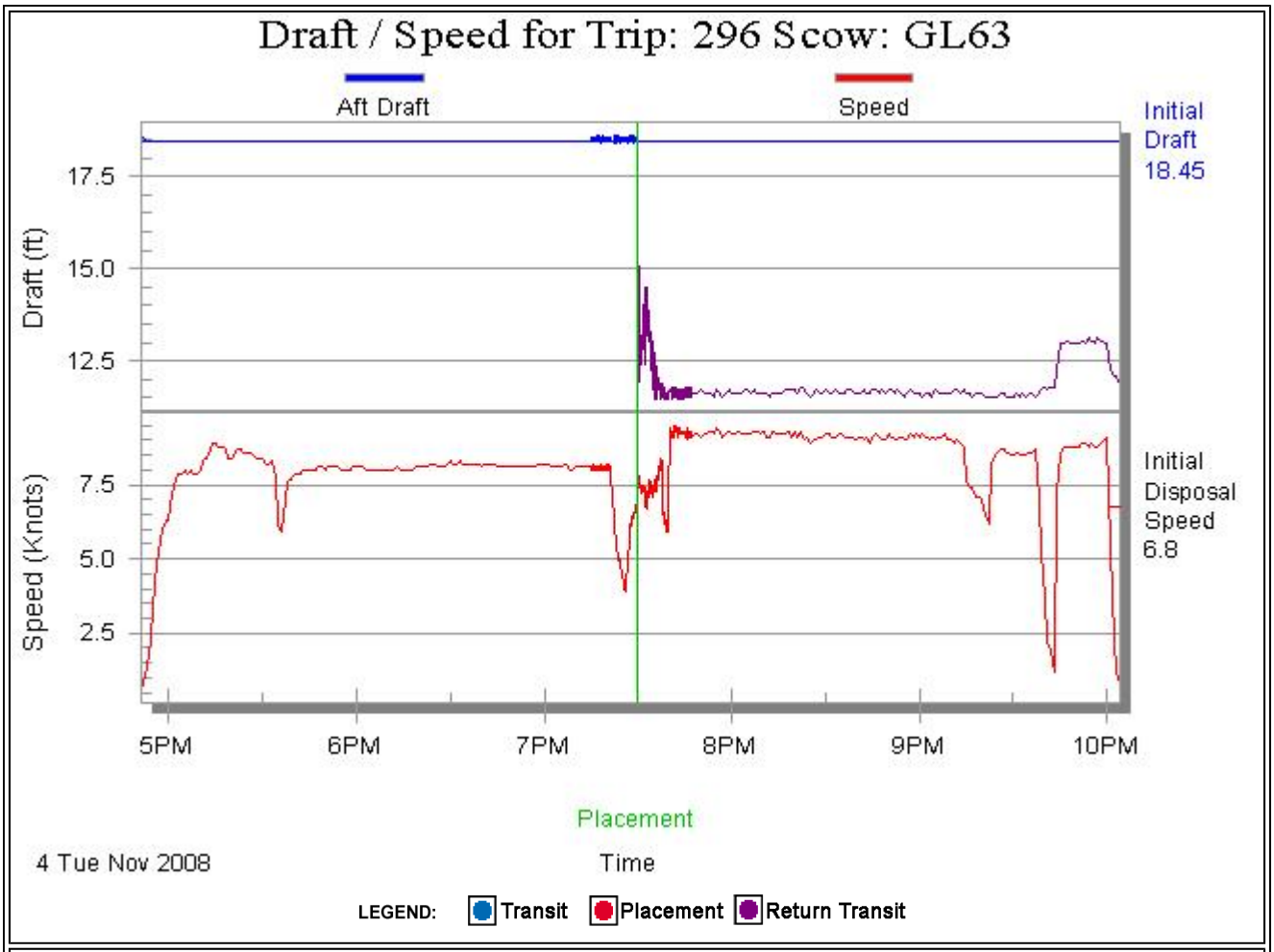

Trip Information

Trip #:	296
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6276 cu yd
Start Time:	11/4/2008 16:51:00
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/4/2008 19:29:50	**Time:**	11/4/2008 19:30:11
Latitude:	42.429651	**Latitude:**	42.429816
Longitude:	-70.582028	**Longitude:**	-70.581136
Aft Draft:	18.45 ft	**Aft Draft:**	15.04 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110608_153103

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W912WJ-07-C-0023

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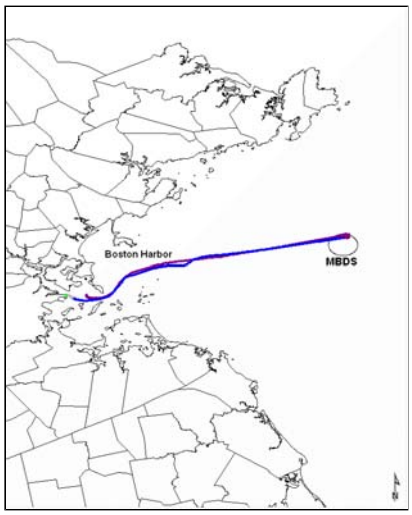
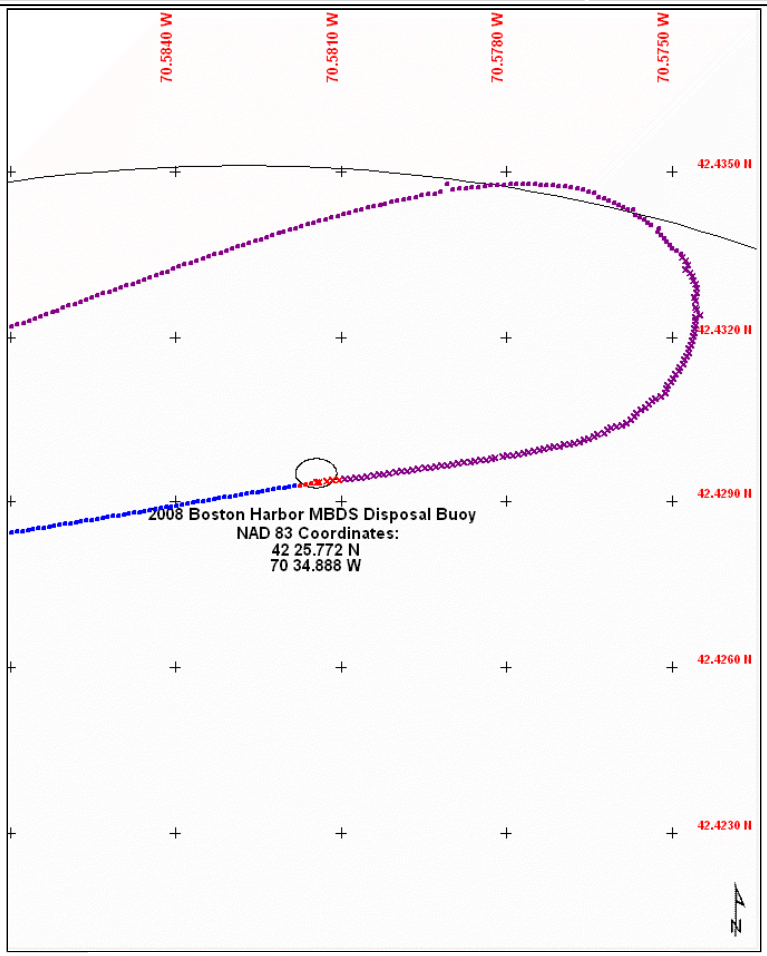
Trip Information:		Placement Information:			
		Placement Start:		Placement End:	
Trip #:	297				
Tug:	Lemmerhirt	**Time:**	11/5/2008 07:15:21	**Time:**	11/5/2008 07:15:35
Captain(s):	Unknown				
Scow:	GL65	**Lat:**	42.429300	**Lat:**	42.429397
Type:	Split Hull Scow	**Long:**	-70.581747	**Long:**	-70.581055
Technique:	Bottom Dump				
Bin Volume:	5800 cu yd				
Start Time:	11/5/2008 04:36:45				
Init Aft Draft:	21.50 ft	**Aft Draft:**	20.59 ft	**Aft Draft:**	11.61 ft
Init Fore Draft:	N/A	**Fore Draft:**	N/A	**Fore Draft:**	N/A
Init Aft Bin:	N/A	**Aft Bin:**	N/A	**Aft Bin:**	N/A
Init Fore Bin:	N/A	**Fore Bin:**	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/5/2008 4:36:45 AM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110508_130505

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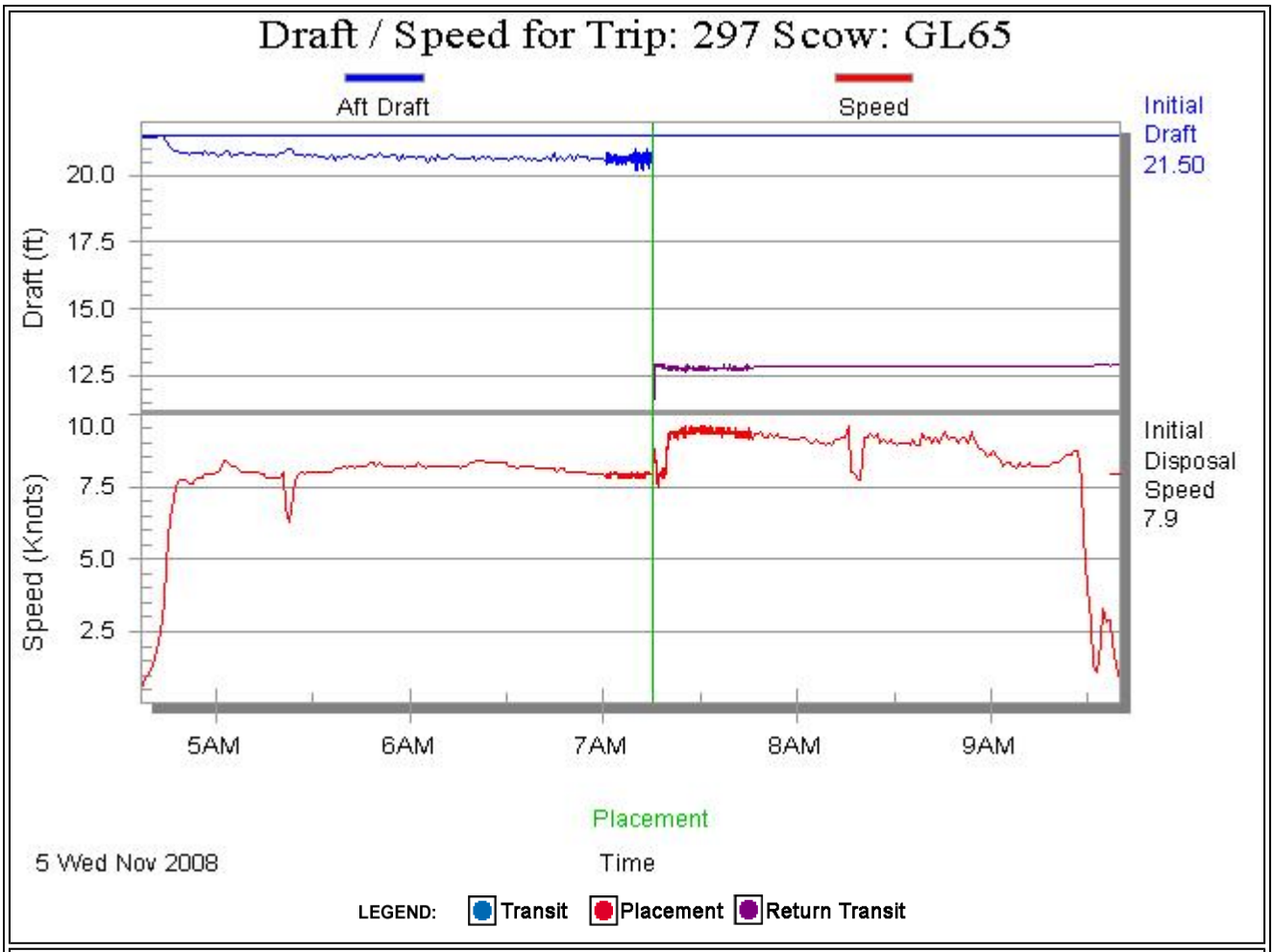

Trip Information

Trip #:	297
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5800 cu yd
Start Time:	11/5/2008 04:36:45
Init Aft Draft:	21.50 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	11/5/2008 07:15:21	**Time:**	11/5/2008 07:15:35
Latitude:	42.429300	**Latitude:**	42.429397
Longitude:	-70.581747	**Longitude:**	-70.581055
Aft Draft:	20.59 ft	**Aft Draft:**	11.61 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110508_130505

2008 Boston Harbor Maintenance Dredging
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Trip Information:

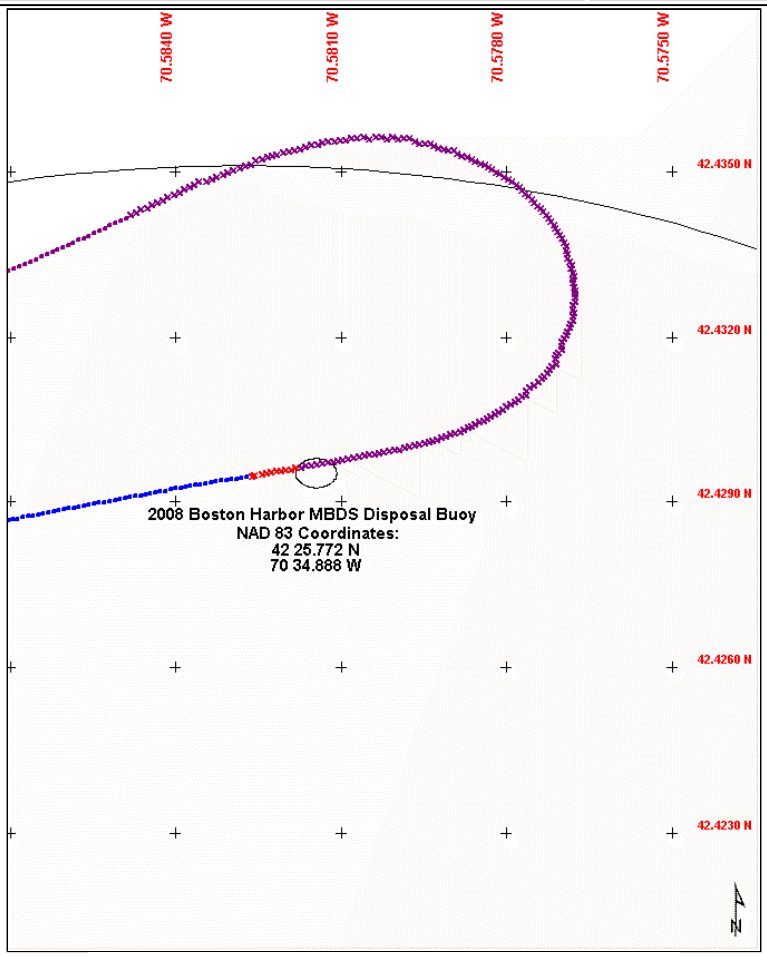
Trip #:	298
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5872 cu yd
Start Time:	11/5/2008 17:21:01
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/5/2008 20:04:47	**Time:**	11/5/2008 20:05:05
Lat:	42.429480	**Lat:**	42.429625
Long:	-70.582626	**Long:**	-70.581830
Aft Draft:	18.45 ft	**Aft Draft:**	12.97 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/5/2008 5:21:01 PM (Local)
Wave Height: 1.0 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



LEGEND: Transit Placement Return Transit
Hull Status: Closed / Unknown Open

Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110608_153214

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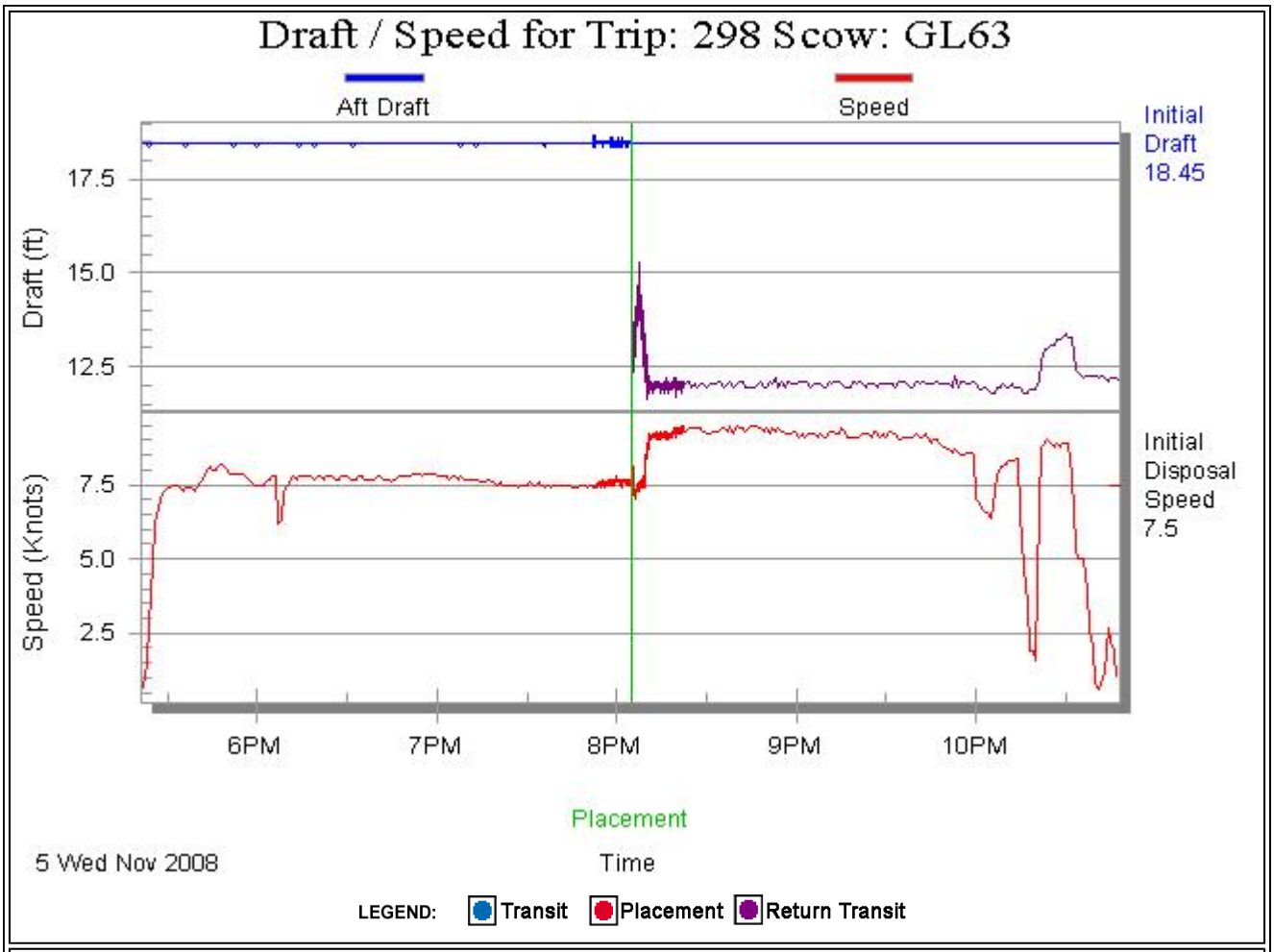

Trip Information

Trip #:	298
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5872 cu yd
Start Time:	11/5/2008 17:21:01
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	11/5/2008 20:04:47	**Time:**	11/5/2008 20:05:05
Latitude:	42.429480	**Latitude:**	42.429625
Longitude:	-70.582626	**Longitude:**	-70.581830
Aft Draft:	18.45 ft	**Aft Draft:**	12.97 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110608_153214

2008 Boston Harbor Maintenance Dredging
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Trip Information:

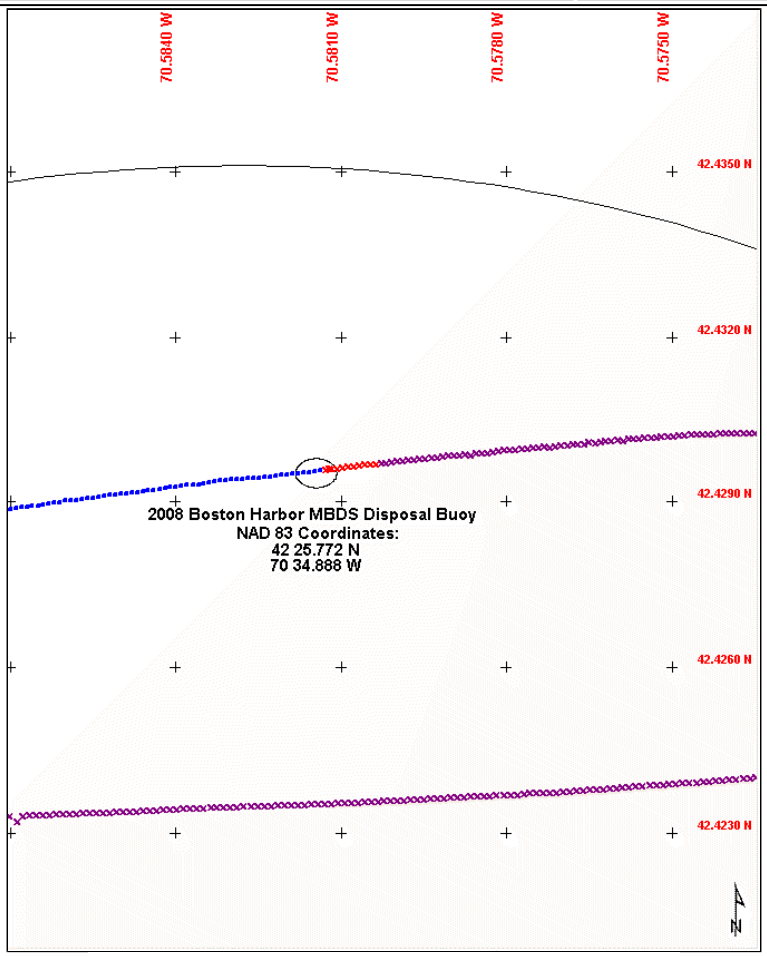
Trip #:	299
Tug:	Lemmerhirt
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	11/5/2008 23:15:32
Init Aft Draft:	13.80 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

	Placement Start:	Placement End:
Time:	11/6/2008 01:47:48	11/6/2008 01:48:06
Lat:	42.429596	42.429700
Long:	-70.581285	-70.580382
Aft Draft:	13.35 ft	13.05 ft
Fore Draft:	N/A	N/A
Aft Bin:	N/A	N/A
Fore Bin:	N/A	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/5/2008 11:15:32 PM (Local)
Wave Height: 2.0 ft **Dominant Wave Period:** 3.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target. No significant change in draft is visibile during load #299 with the GL65, possibly due to a malfunctioning draft sensor. The disposal phase is based on scow position as well as data from the hull status sensor. SAIC traveled to the project site on 11/6/08 to replace the draft sensor installed on the GL65. The hull status sensor remained in the Open position during the return transit of load #299. The sensor returned to the Closed position after returning to the dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 110608_155957

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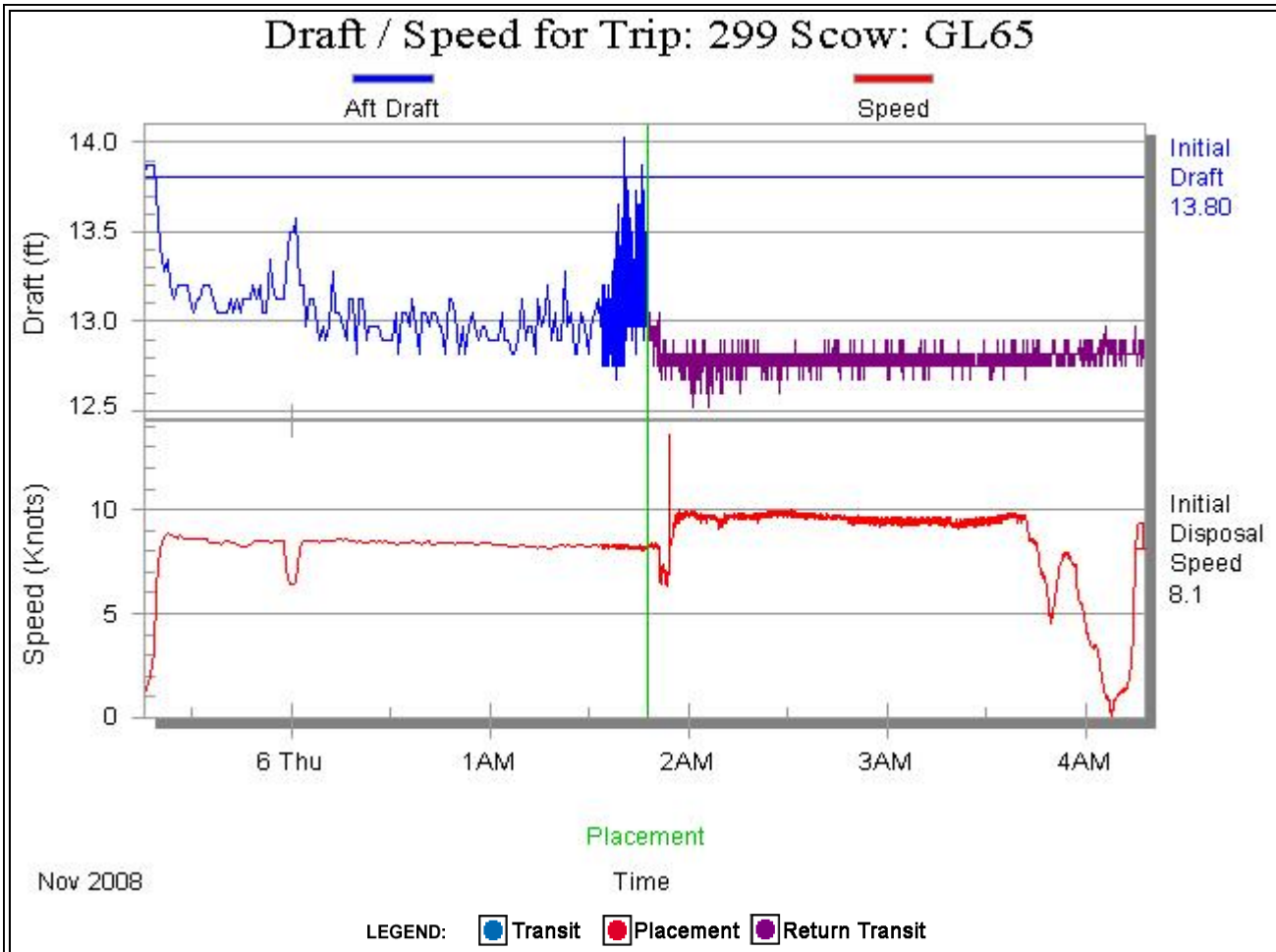


Trip Information

Trip #:	299
Tug Name:	Lemmerhirt
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	5900 cu yd
Start Time:	11/5/2008 23:15:32
Init Aft Draft:	13.80 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Material Source: Unknown **Material Description:** Unknown

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/6/2008 01:47:48	**Time:**	11/6/2008 01:48:06
Latitude:	42.429596	**Latitude:**	42.429700
Longitude:	-70.581285	**Longitude:**	-70.580382
Aft Draft:	13.35 ft	**Aft Draft:**	13.05 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target. No significant change in draft is visibile during load #299 with the GL65, possibly due to a malfunctioning draft sensor. The disposal phase is based on scow position as well as data from the hull status sensor. SAIC traveled to the project site on 11/6/08 to replace the draft sensor installed on the GL65. The hull status sensor remained in the Open position during the return transit of load #299. The sensor returned to the Closed position after returning to the dredge site.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 110608_155957

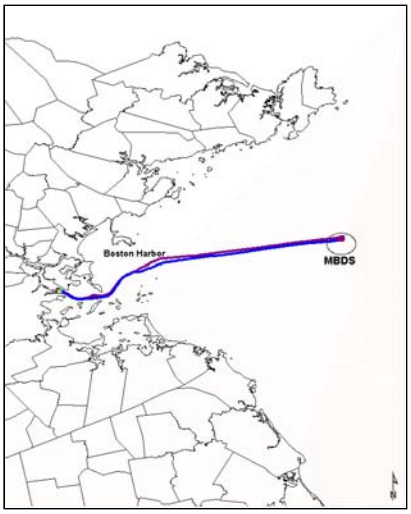
2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

Trip Information:

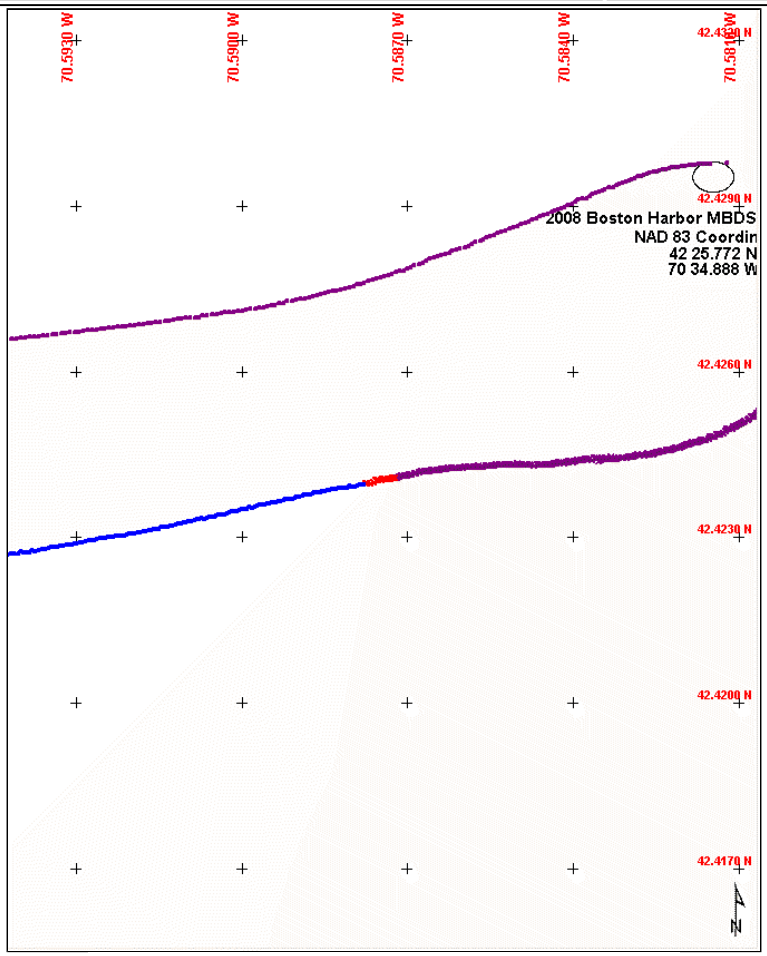
Trip #:	300
Tug:	Harold A. Reinaeur II
Captain(s):	Unknown
Scow:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6050 cu yd
Start Time:	11/10/2008 00:06:54
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/10/2008 03:42:32	**Time:**	11/10/2008 03:42:56
Lat:	42.423968	**Lat:**	42.424093
Long:	-70.587766	**Long:**	-70.587226
Aft Draft:	18.45 ft	**Aft Draft:**	12.18 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A



Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/10/2008 12:06:54 AM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013



Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 111808_104506

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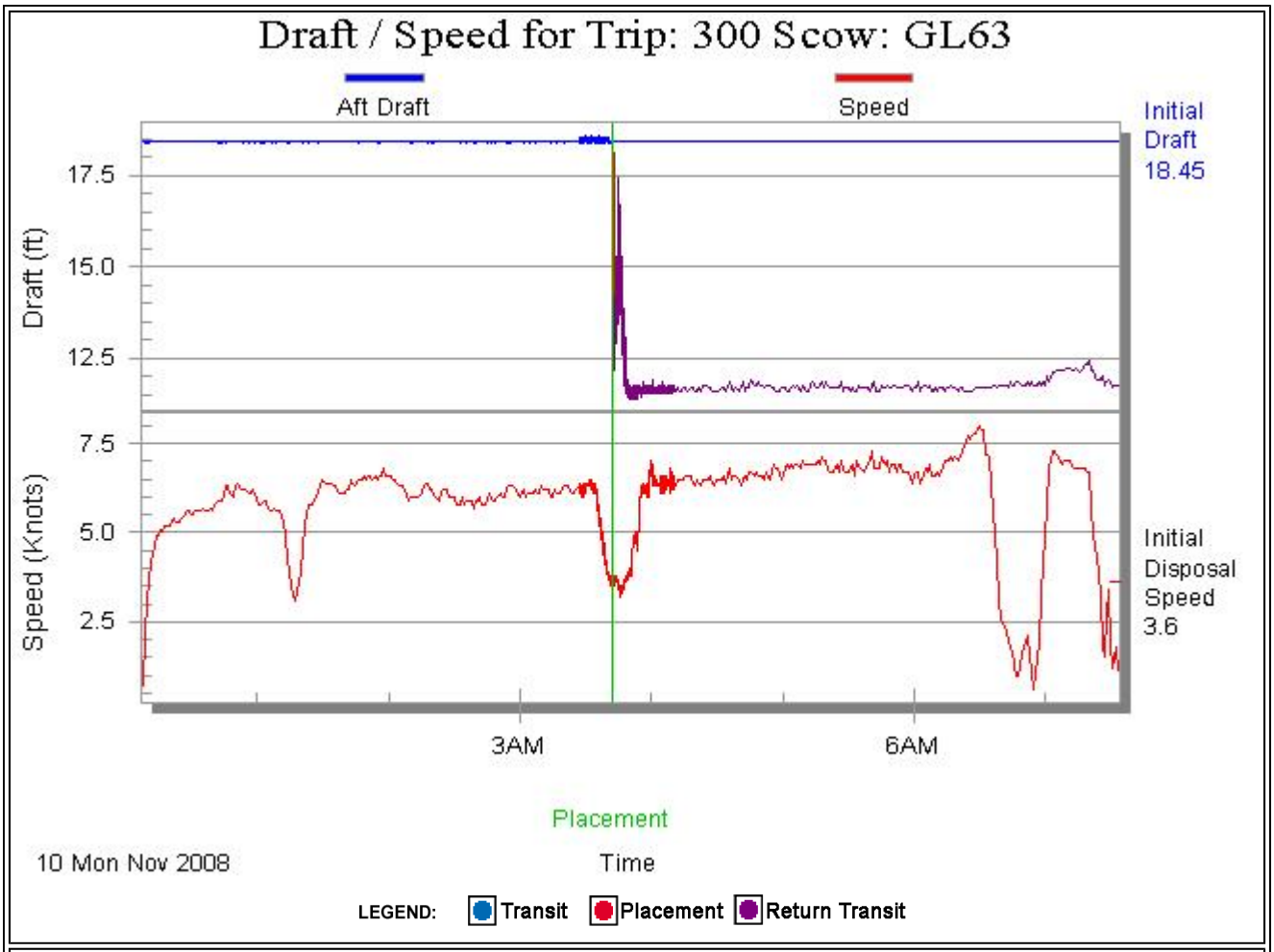

Trip Information

Trip #:	300
Tug Name:	Harold A. Reinaeur II
Captain(s):	Unknown
Scow Name:	GL63
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	6050 cu yd
Start Time:	11/10/2008 00:06:54
Init Aft Draft:	18.45 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/10/2008 03:42:32	**Time:**	11/10/2008 03:42:56
Latitude:	42.423968	**Latitude:**	42.424093
Longitude:	-70.587766	**Longitude:**	-70.587226
Aft Draft:	18.45 ft	**Aft Draft:**	12.18 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 111808_104506

2008 Boston Harbor Maintenance Dredging
W912WJ-07-C-0023

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Trip Information:

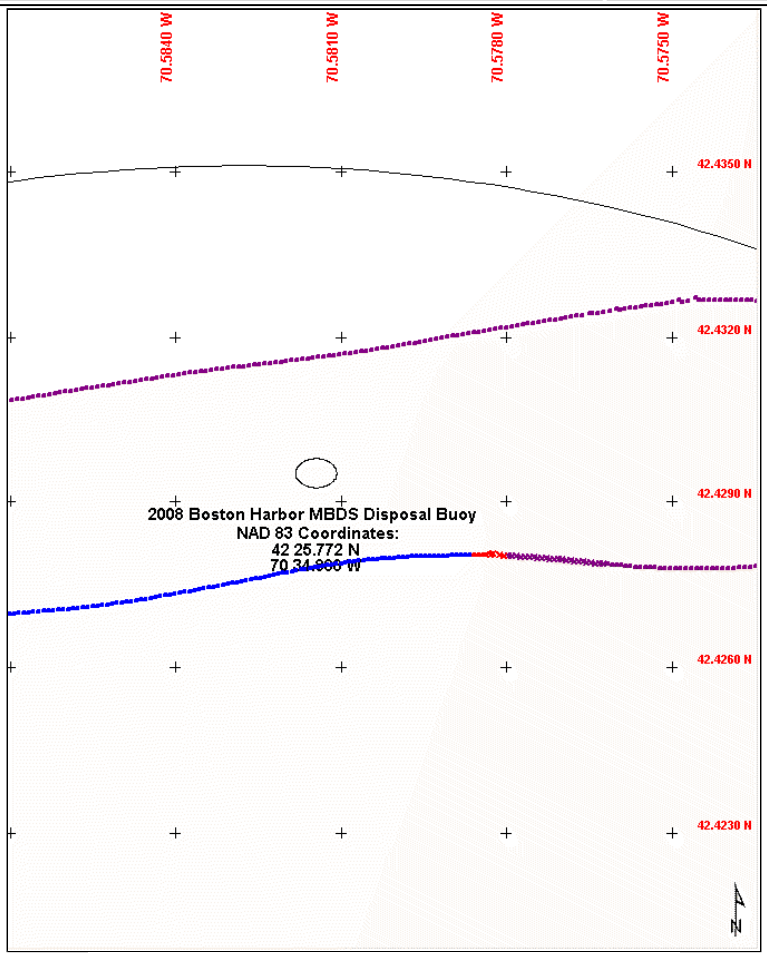
Trip #:	301
Tug:	Harold A. Reinaeur II
Captain(s):	Unknown
Scow:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	3800 cu yd
Start Time:	11/10/2008 07:17:15
Init Aft Draft:	15.44 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		**Placement End:**	
Time:	11/10/2008 10:54:13	**Time:**	11/10/2008 10:54:27
Lat:	42.428037	**Lat:**	42.428030
Long:	-70.578593	**Long:**	-70.578048
Aft Draft:	14.83 ft	**Aft Draft:**	13.02 ft
Fore Draft:	N/A	**Fore Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown
Wave Information Recorded: 11/10/2008 7:17:15 AM (Local)
Wave Height: 1.6 ft **Dominant Wave Period:** 9.0 sec **NOAA Station:** 44013





Notes: SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com
Version: 111008_165805

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W912WJ-07-C-0023

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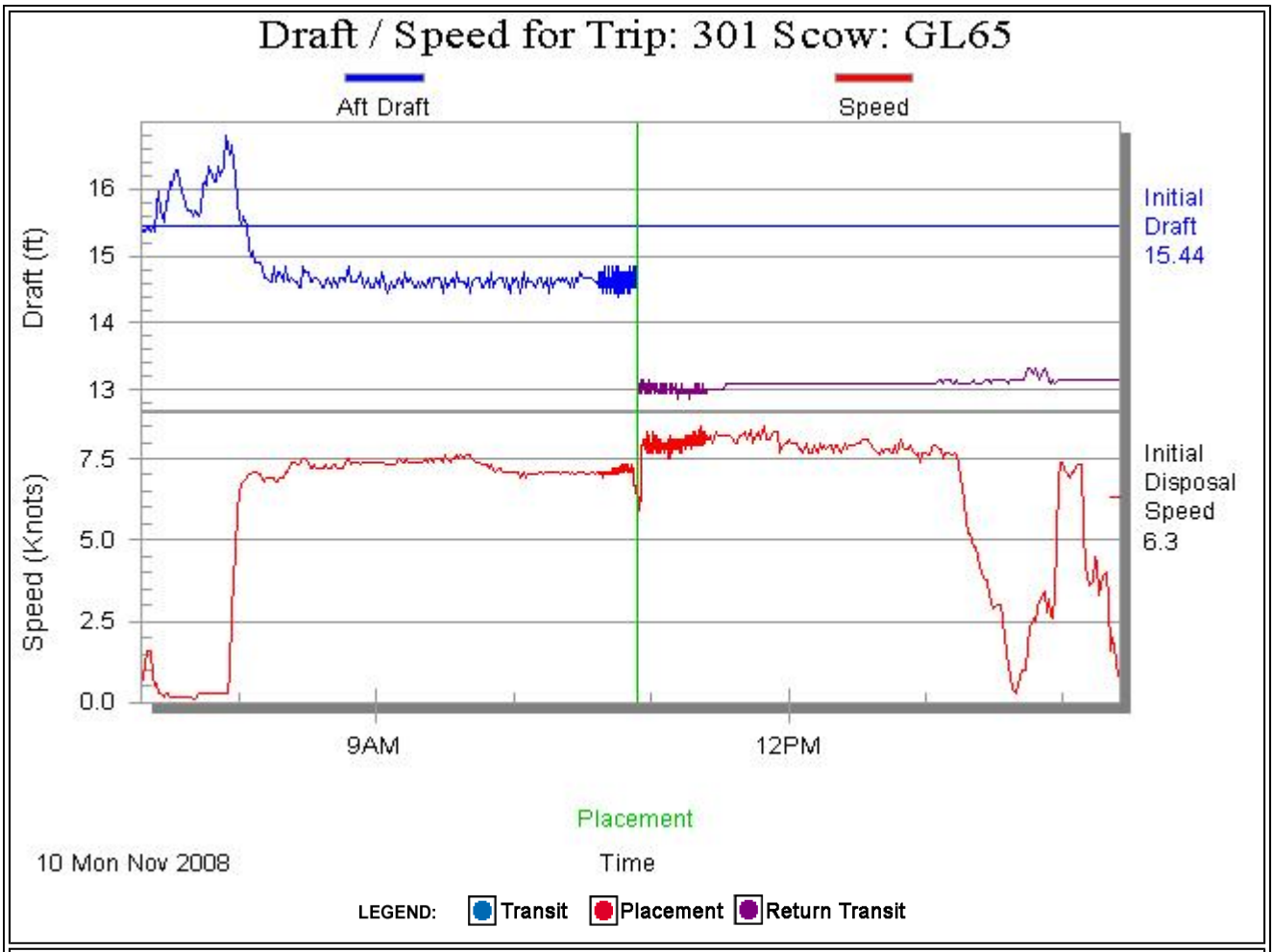


Trip Information

Trip #:	301
Tug Name:	Harold A. Reinaeur II
Captain(s):	Unknown
Scow Name:	GL65
Type:	Split Hull Scow
Technique:	Bottom Dump
Bin Volume:	3800 cu yd
Start Time:	11/10/2008 07:17:15
Init Aft Draft:	15.44 ft
Init Fore Draft:	N/A
Init Aft Bin:	N/A
Init Fore Bin:	N/A

Placement Information:

Placement Start:		Placement End:	
Time:	11/10/2008 10:54:13	**Time:**	11/10/2008 10:54:27
Latitude:	42.428037	**Latitude:**	42.428030
Longitude:	-70.578593	**Longitude:**	-70.578048
Aft Draft:	14.83 ft	**Aft Draft:**	13.02 ft
Fore Draft:	N/A	**Forward Draft:**	N/A
Aft Bin:	N/A	**Aft Bin:**	N/A
Fore Bin:	N/A	**Fore Bin:**	N/A

Material Source: Unknown **Material Description:** Unknown

Data Information:

Type: ADISSPlay Data.

Notes:

SAIC designated placement locations illustrate a successful placement of material in disposal site target.

SAIC Point of Contact: Marc Wakeman **Phone:** (401)847-4210 **E-mail:** info@adiss-afiss.com

Version: 111008_165805

Appendix B

Sediment-Profile Image Results

June 2008 SPI Survey			
Station	Replicate	Mean Dredged Material Thickness (cm)	Comment
01-25-SE	A	0.22	
01-25-SE	B	0.38	
01-25-SE	C	0.43	
01-50-W	A	0.41	
01-50-W	B	0.18	
01-50-W	C	0.53	
01-100-W	A	0.11	Discontinuous
01-100-W	B	0.13	Discontinuous
01-100-W	C	<0.04	Trace, discontinuous
01-200-N	A	0.82	Mixed
01-200-N	B	0.88	
01-200-N	C	0.64	Mixed
01-200-W	A	0.14	Discontinuous
01-200-W	B	0.15	Trace
01-200-W	C	0.12	Trace, discontinuous
01-250-N	A	0.85	Partially mixed
01-250-N	B	0.59	
01-250-N	C	0.44	
01-250-W	A	0.20	Trace, discontinuous
01-250-W	B	0.05	Trace, discontinuous
01-250-W	C	0.19	
01-300-N	A	<0.04	Trace, discontinuous
01-300-N	B	0.49	
01-300-N	C	0.35	
01-300-W	A	0.08	
01-300-W	B	0.19	
01-300-W	C	0.19	Discontinuous
01-350-N	A	0.70	
01-350-N	B	0.08	Disturbed, discontinuous; clasts at depth are smear artifacts
01-350-N	C	0.61	
01-350-W	A	0.04	Trace, discontinuous
01-350-W	B	<0.04	Trace, discontinuous
01-350-W	C	0.05	Trace, discontinuous
01-400-N	A	0.85	Mixed, clast at depth, possible layering
01-400-N	B	0.50	
01-400-N	C	0.69	13.9 cm total DM, some perhaps old at depth
01-400-W	A	0.12	
01-400-W	B	0.07	Trace, discontinuous
01-400-W	C	0.04	Trace, discontinuous
01-400-W	D	0.16	
01-475-N	A	<0.04	Trace, unmeasurable.
01-475-N	B	0.23	Discontinuous
01-475-N	C	0.08	Trace, discontinuous
01-500-W	A	0.12	Trace, discontinuous
01-500-W	B	0.07	Trace, discontinuous
01-500-W	C	0.11	Trace, discontinuous
01-550-N	A	0.24	Discontinuous

June 2008 SPI Survey (continued)			
Station	Rep	Mean Dredged Material Thickness (cm)	Comment
01-550-N	B	<0.04	Trace, unmeasurable due to mixing. Possible clasts 10 cm below SWI
01-550-N	C	0.25	
01-600-W	A	<0.04	Trace, unmeasurable.
01-600-W	B	0.15	Discontinuous
01-600-W	C	0.04	Trace, discontinuous
01-650-N	A	0.18	
01-650-N	B	<0.04	Trace, unmeasurable.
01-650-N	C	<0.04	Trace, unmeasurable.
01-650-W	A	<0.04	Trace, unmeasurable.
01-650-W	B	0.10	Thin dusting
01-650-W	C	<0.04	Trace, unmeasurable.
01-700-W	A	0.02	Trace, discontinuous
01-700-W	B	0.04	Trace, discontinuous
01-700-W	C	0.07	Trace, discontinuous
01-750-N	A	<0.04	Trace, unmeasurable.
01-750-N	B	<0.02	Trace, unmeasurable.
01-750-N	C	<0.02	Trace, unmeasurable.
01-800-W	A	<0.02	Trace, unmeasurable.
01-800-W	B	0.06	Thin dusting
01-800-W	C	0.16	DM in sed column are wiper clast artifacts
01-850-N	A	<0.02	Trace, unmeasurable, barely visible as dusting
01-850-N	B	<0.02	Trace, unmeasurable, barely visible as dusting
01-850-N	C	<0.02	Trace, unmeasurable, barely visible as dusting
01-950-N	A	<0.02	Trace, unmeasurable, barely visible as dusting
01-950-N	B	0.00	
01-950-N	C	<0.02	Trace, unmeasurable, barely visible as dusting
01-1050-N	A	<0.02	Trace, barely perceptible.
01-1050-N	B	<0.02	Trace, barely perceptible.
01-1050-N	C	<0.02	Trace, barely perceptible.
01-1150-N	A	0.39	Diffuse mixed
01-1150-N	B	0.06	Thin laminar dusting
01-1150-N	C	<0.02	Trace, barely perceptible.
01-CTR	A	5.35	Chaotic fabric
01-CTR	B	7.15	Chaotic fabric
01-CTR	C	4.71	Multiple small clay clasts
06-Center	A	10.69	>p chaotic
06-Center	B	10.17	>p chaotic
06-Center	C	9.46	>p chaotic
11-500-N	A	<0.04	Trace mixed, old DM 12.7 cm
11-500-N	B	<0.04	Trace barely perceptible new DM, old DM to -15 cm
11-500-N	C	<0.04	Trace barely perceptible new DM, old DM to -13 cm
11-550-N	A	<0.02	Trace barely perceptible new DM, old DM to -15.8 cm
11-550-N	B	<0.02	Trace barely perceptible new DM, old DM to -16 cm
11-550-N	C	0.00	Old Dm present.
11-600-N	A	0.00	Old DM to -17 cm
11-600-N	B	0.00	Old DM to -15 cm - >p
11-600-N	C	0.00	Old DM to -15 cm - >p
11-650-N	A	<0.02	Trace barely perceptible new DM, old DM to -19 cm
11-650-N	B	0.00	Old DM >P
11-650-N	C	0.00	Old DM >P, 17 cm.

June 2008 SPI Survey (continued)			
Station	Replicate	Mean Dredged Material Thickness (cm)	Comment
11-700-N	A	<0.02	Trace barely perceptible new DM, old DM to -15.3 cm, >P
11-700-N	B	0.00	Old DM >P, 16.1 cm.
11-700-N	C	0.00	Old DM >P, 15.5 cm.
11-750-N	A	1.71	Old DM >P
11-750-N	B	<0.02	Trace barely perceptible new DM, old DM to -13.5 cm, >P
11-750-N	C	0.00	Old DM >P, 14.9 cm.
11-800-N	A	<0.02	Trace barely perceptible new DM, old DM to -15.5 cm, >P
11-800-N	B	<0.02	Trace new DM, old DM to -16.9 cm, >P
11-800-N	C	0.00	Old DM >P, 16.9 cm.
11-850-N	A	0.00	Old DM >P, 14.6 cm.
11-850-N	B	0.00	Old DM 15.4cm.
11-850-N	C	0.00	Old DM >P, 14.6 cm.
11-900-N	A	0.00	Old DM >P, 14.9 cm.
11-900-N	B	0.00	
11-900-N	C	0.00	Old DM 15.3 cm.
11-950-N	A	0.00	
11-950-N	B	0.00	
11-950-N	C	0.00	Old DM at bottom of frame but surface disturbed from sampling
11-1000-N	A	0.00	Clay appears to be smearing artifact
11-1000-N	B	0.00	Clay appears to be smearing artifact
11-1000-N	C	0.00	Clay appears to be smearing artifact
11-1050	A	0.20	trace of new DM over old DM >P
11-1050	B	0.35	trace of new DM over old DM >P
11-1050	C	0.26	trace of new DM over old DM >P
11-1100	A	<0.02	trace of new DM over old DM >P
11-1100	B	0.44	trace of new DM over old DM >P
11-1100	C	<0.02	trace of new DM over old DM >P
11-1150-N	A	0.00	
11-1150-N	B	<0.02	Trace barely perceptible new DM
11-1150-N	C	<0.02	Trace barely perceptible new DM
11-1200-N	A	0.00	
11-1200-N	B	0.00	
11-1200-N	C	0.00	Old Dm at 9.6 cm
11-Center	A	8.63	Chaotic fabric with cohesive clay
11-Center	B	5.78	Chaotic, ill defined layer, but obviously fresh DM
11-Center	C	7.07	Chaotic fabric with cohesive clay
11-Center	D	7.12	Chaotic fabric with cohesive clay

Notes: Ind.=Indeterminate
pen=penetration

July 2008 SPI Survey			
Station	Replicate	Mean Dredged Material Thickness (cm)	Comment
BARS-01-01		5.1	distinct DM layer, some mixing w/ ambient at bottom of DM layer
BARS-01-02		1.7	surface DM layer is thin and mixed; extensive downward smearing of clay clasts in image
BARS-01-03		1.0	surface DM layer is thin+mixed and slightly discontinuous; slight downward smearing of whitish clay
BARS-01-04		0.3	DM layer discontinuous and mixed, w/ dragdown of small, light grey clasts
BARS-01-05		0.3	DM layer thin, discontinuous and mixed, some dragdown of whitish clay
BARS-01-06		8.6	Chaotic fabric w/ extensive smearing of clay@depth; Discrete DM layer w/ extensive mixing w/ ambient @ depth
BARS-01-07		>3.4 (>pen)	DM>pen; low pen=clay must be very stiff @ depth=very large cohesive clump?
BARS-01-09		Ind.	No pen = assume fresh DM consisting of very stiff clay
BARS-01-10		Ind.	No pen; clay chunks visible in farfield; assume fresh DM=stiff clay
BARS-01-11		Ind.	water shot w/ planview camera visible=SPI prism did not descend=resting on clump of stiff DM??
BARS-01-13		>15.3 (>pen)	DM>pen=SPI camera has transected a relatively large cohesive clay chunk
BARS-01-14		>1.1 (>pen)	DM>pen; very low penetration=DM is very stiff clay
BARS-01-15		>6.5 (>pen)	DM>pen; moderate pen=DM is smaller cohesive clay clasts; some ambient mixed in
BARS-01-16		>0.8 (>pen)	DM>pen; very low pen=dm is stiff clay clumps+clasts
BARS-01-17		>pen	DM>pen; low pen=dm is very stiff clay; mix of large and small cohesive clumps in farfield
BARS-01-18		3.8	discrete surface layer of DM; bottom of DM layer is indistinct due to mixing w/ ambient; extensive dragdown of clay
BARS-01-19		1.9	discrete surface layer of DM; bottom of DM layer indistinct/mixed; dragdown of clay
BARS-01-20		1.1	Discrete surface layer of DM w/ indistinct bottom due to mixing w/ ambient; clay dragdown
BARS-01-21		>3.3 (>pen)	DM>pen; low pen=clay is very stiff/cohesive; large cohesive chunks
BARS-01-22		>3.6 (>pen)	DM>pen; low pen=stiff clay chunk
BARS-01-23		>12.9 (>pen)	DM>pen=large angular clumps of very stiff clay w/ high relief
BARS-01-24		>2.1 (>pen)	DM>pen; low pen=assume very stiff clay chunks
BARS-01-25		>9.2 (>pen)	DM>pen; mix of small cohesive clumps@swi over softer clay material@depth
BARS-01-26		>4.4 (>pen)	DM>pen; low pen=very stiff clay chuncks
BARS-01-27		>11.1 (>pen)	DM>pen; softer clay material w/ small cohesive clasts@swi
BARS-01-28		2.3	Discrete DM layer over ambient; bottom of Dm layer is mixed/indistinct
BARS-01-29		2.0	Discrete DM layer over ambient; bottom of Dm layer is mixed/indistinct
BARS-01-30		1.8	Discrete DM layer over ambient; bottom of Dm layer is mixed/indistinct
BARS-01-31		0.8	Trace DM; mixed with ambient
BARS-01-32		>pen	No pen; clay chunks in farfield; assume very stiff clay DM
BARS-01-33		Ind.	No pen = assume fresh DM consisting of very stiff clay
BARS-01-34		Ind.	No pen = assume fresh DM consisting of very stiff clay
BARS-01-35		>2.1 (>pen)	DM>pen; low pen=large angular chunks of very stiff clay
BARS-01-36		>11.0 (>pen)	DM>pen; stiff clay w/ somewhat loose texture (large interstitial space)

July 2008 SPI Survey (continued)			
Station	Replicate	Mean Dredged Material Thickness (cm)	Comment
BARS-01-37		3.9	Discrete DM layer over ambient; bottom of DM layer mixed w. ambient; DM=loose w/ very small clasts; dragdown/smearing of clay to depth
BARS-01-38		1.1	Discrete DM layer over ambient; DM layer mostly thin+discontinuous; dragdown/smearing of clay@depth
BARS-01-39		1.0	Discrete DM layer over ambient; DM layer discontinuous+mixed w/ ambient; whitish clay@depth=old DM or smearing??
BARS-01-40		1.8	DM layer is discontinuous+mixed w/ ambient; clasts in farfield; dragdown/smearing of clay@depth
BARS-01-41		1.8	Discrete DM layer over ambient; DM layer is discontinuous+mixed w/ ambient; some dragdown/smearing of clay@depth
BARS-01-42		1.4	Discrete DM layer over ambient; DM is mixed w/ ambient; dragdown/smearing of clay below DM layer
BARS-01-43		1.5	Discrete DM layer over ambient; DM is mixed w/ ambient; dragdown/smearing of clay below DM layer
BARS-01-44		2.1	Discrete DM layer over ambient; DM is mixed w/ ambient; dragdown/smearing of clay below DM layer

Notes: Ind.=Indeterminate
pen=penetration

August 2008 SPI Survey			
Station	Replicate	Mean Dredged Material Thickness (cm)	Comment
MBDS-02-01		>10	
MBDS-02-02		>10	
MBDS-02-03		0-1	
MBDS-02-04		2	
MBDS-02-05		2	
MBDS-02-06		3	
MBDS-02-07		4	
MBDS-02-08		4	
MBDS-02-09		4	
MBDS-02-10		4	
MBDS-02-11		>10	
MBDS-02-12		>10	
MBDS-02-13		>10	
MBDS-02-14		Ind.	
MBDS-02-15		>10	
MBDS-02-16		>10	
MBDS-02-17		>10	
MBDS-02-18		>10	
MBDS-02-19		>10	
MBDS-02-20		>10	
MBDS-02-21		>10	
MBDS-02-22		ind	
MBDS-02-23		>10	
MBDS-02-24		>10	
MBDS-02-25		>10	
MBDS-02-26		>10	
MBDS-02-27		>10	
MBDS-02-28		>10	
MBDS-02-29		>10	
MBDS-02-30		>10	
MBDS-02-31		>10	
MBDS-02-32		>10	
MBDS-02-33		>10	
MBDS-02-34		ind	
MBDS-02-35		>10	
MBDS-02-36		>10	
MBDS-02-37		5	
MBDS-02-38		>10	
MBDS-02-39		>10	
MBDS-02-40		>10	
MBDS-02-41		Ind.	Very low penetration
MBDS-02-42		Ind.	Very low penetration
MBDS-02-43		>10	low penetration
MBDS-02-44		>10	
MBDS-02-45		>10	low penetration
MBDS-02-46		>10	dense clay with fines on top
MBDS-02-47		>10	dense clay with fines on top
MBDS-02-48		>10	
MBDS-02-49		>10	puzzle fabric
MBDS-02-50		>10	low penetration

August 2008 SPI Survey (continued)			
Station	Replicate	Mean Dredged Material Thickness (cm)	Comment
MBDS-02-51		>10	low penetration
MBDS-02-52		>10	good penetration puzzle fabric
MBDS-02-53		>10	mod penetration
MBDS-02-54		Ind.	low penetration thin bathy high backscatter
MBDS-02-55		>10	mod penetration thick fresh DM layer
MBDS-02-56		>10	good penetration thick layered DM thin bathy
MBDS-02-57		>10	washed before station, clumps real
MBDS-02-58		>10	not washed
MBDS-02-59		Ind.	water shot, not washed can map streaks
MBDS-02-60		Ind.	low penetration, clump on surface
MBDS-02-61		>10	low penetration
MBDS-02-62		Ind.	water shot,washed no streaks
MBDS-02-63		Ind.	low penetration
MBDS-02-64		>10	low penetration
MBDS-02-65		>10	low penetration
MBDS-02-66		>10	good penetration
MBDS-02-67		>10	good penetration
MBDS-02-68		>10	good penetration

Notes: Ind.=Indeterminate
pen=penetration

Appendix C

Sediment Core Logs

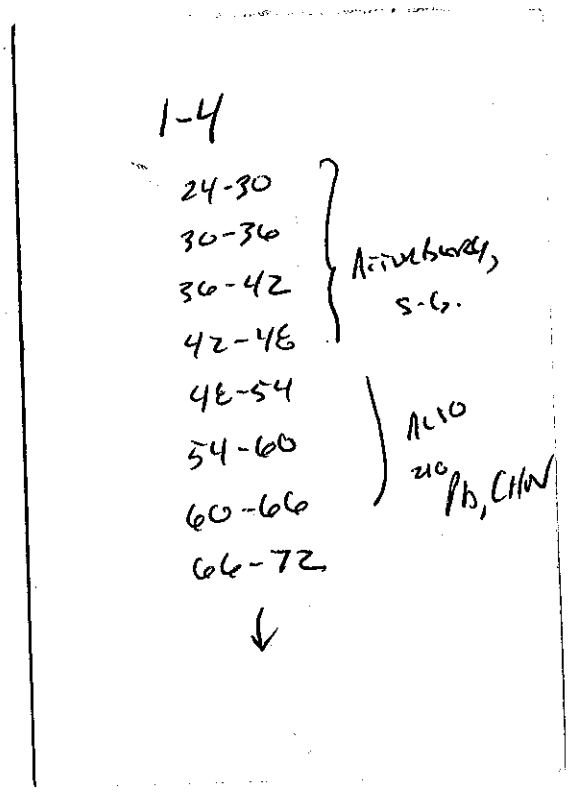
	Client: U.S. ACE			CORE ID: 01-03
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: RMC		Date: 7/21	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15		SOFT OLIVE BROWN SILT w/ FINE TO MEDIUM SAND H_2S ODOR SHELL FRAGMENTS THROUGHOUT
30		TO 33cm ABRUPT TRANSITION
45		SOFT OLIVE BROWN SILT w/ TRACE FINE SAND SHELL FRAGMENTS THROUGHOUT
60		H_2S ODOR INCREASING AT DEPTH
75		
90		
105		
120		↓
135		TO 127 cm
150		
165		
180		

HORIZON	SHEAR VALUE kg/cm^2
A	~0.2 · 0.7 = 0.14
B	
C	0.2 · 0.7 = 0.14
D	
E	0.2 · 0.8 = 0.16
F	
G	0.2 · 1.4 = 0.28
H	
I	0.2 · 1.4 = 0.28
J	
30 cm K	0.2 · 1.5 = 0.3
L	0.2 · 1.5 = 0.3
M	0.2 · 1.8 = 0.36
N	0.2 · 2.0 = 0.4
O	0.2 · 2.1 = 0.42
P	0.2 · 2.3 = 0.46
Q	0.2 · 2.1 = 0.42
R	0.2 · 2.4 = 0.48
S	0.2 · 2.1 = 0.42
T	0.2 · 2.6 = 0.52
U	0.2 · 2.6 = 0.52
V	0.2 · 2.8 = 0.54
W	0.2 · 2.8 = 0.54
X	0.2 · 3.4 = 0.68
Y	0.2 · 2.8 = 0.54
Z	0.2 · 3.7 = 0.74

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):


1-4
24-30
30-36
36-42
42-48
48-54
54-60
60-66
66-72
Activities, S.G.
ALIO
210Pb, CHN

	Client: U.S. ACE			**CORE ID:** 1-4
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15		WATERY AMBIENT MATERIAL TO 12-15 cm
30		TRANSITION SOL MOIST TO DRY 25-30 cm
45		
60		
75		
90		
105		
120		
135		
150		
165		
180		

VANE SHEAR (0.2 wks)

Kg/cm²	
0-6	~~0.5~~ 0.05
6-12	~~0.9~~ 0.09
12-18	~~1.4~~ 0.14
18-24	~~1.5~~ 0.15
24-30	~~1.4~~ 0.14
30-36	~~1.4~~ 0.14
36-42	~~2.4~~ 0.24
42-48	0.20
48-54	0.20
54-60	0.23
60-66	0.23
66-72	0.2
72-78	0.22
78-84	0.22
84-90	~~0.27~~ 0.22
90-96	~~0.3~~ 0.24
96-102	~~0.19~~ 0.25
102-108	0.19
108-114	0.3
114-120	0.3
120-126	0.25

MEASURED 0-3, 3-6 ... TO 30-34, 34-42, 42-48

M ALL LOWER TO 126

PL } 30-54
GS }

ARCHIVE 54-126 LC PLASTIC.

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE	**CORE ID:** 1-5
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: RMC / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR kg/cm^2
	0	LIGHT BROWN/TAN SOFT SILT w/ TRACE FINE SAND	0-6 0.2 · 0.2 = 0.04
15	3	TRANSITION ~8cm	6-12 0.7 · 0.2 = 0.14
30	6	SURFACE APPEARS SANDY BUT CORE CONTAINS MINIMAL SAND	12-18 1.2 · 0.2 = 0.24
			18-24 1.6 · 0.2 = 0.32
45	9	LIGHT BROWN SOFT SILT W/ TRACE FINE SAND	24-30 2 · 0.2 = 0.4
60	12		
75	15	ORGANIC DEBRIS @ 16cm	WEIGHT (g) ACTUAL
90	18		A 6.4 B 6.8 C 6.4 D 6.8 E 6.9 F 6.8 G 7.1 H 0.5 I 6.9 J 7.2 K 7.1
105	21		
120	24		
135	27		
150	30		
165	33	33 cm EOC	
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 01-6
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:		% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
		ORGANIC DEBRIS
15	3	LIGHT BROWN / TAN SOFT SILT w/ SOME FINE SAND
30	6	
45	9	
60	12	
75	15	BROWN SOFT SILT
90	18	
105	21	
120	24	
135	27	DARKER BROWN SHELL FLAG @ 27 cm AT DEPTH
150	30	
165		32 cm EOC
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 2-5
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: RMT		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	Kg/cm2 VANE SHEAR
	0		
		SOFT LIGHT BROWN SILT	0-6 0.4 · 0.2 = 0.08
15	3	W/ TRACE FINESAND SLUMPING IN TUBE	
			6-12 1.5 · 0.2 = 0.30
30	6		12-18 2.0 · 0.2 = 0.40
		SOFT LIGHT BROWN SILT	18-24 2.8 · 0.2 = 0.56
45	9	W/ TRACE FINE SAND MORE COMPACT	
		THAN ABOVE	24-30 2.0 · 0.2 = 0.4
60	12	HORIZON	UNEVEN SURFACE
			* MOISTURE
75	15	SLIGHTLY LIGHT BROWN SILT	WEIGHT ACTUAL (J)
		W/ TRACE SAND	
90	18	SHELL FRAG @ 18cm	A 9.7
			B 9.7
105	21		C 9.0
			D 9.4
			E 10.3
120	24		F 8.9
			G 9.8
			H 9.6
135	27		I 9.9
			J 10.4
150	30	29cm EOC	* NO XENSION / VOLUME MEAS.
165			
180			

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

2-6

0-6
6-12
12-18
18-24
24-30

S.G. @ Atterberg

	Client: U.S. ACE			**CORE ID:** 02-06
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:		% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15		MEDIUM TAN / BROWN SOFT SILT W/ FINE SAND
30		SAND DECREASING AT DEPTH BLACK STREAK @ 25cm
45		
60		
75		
90		
105		
120		
135		
150		
165		
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

3-1

24-27
30-36
36-42
42-48
48-54

S.G. &

ASTURBURG

	Client: U.S. ACE	CORE ID: 3-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: % Recovery:	No. Attempts:

(-1.0g)
MASSG
~~weigh~~

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR (x 0.2)		
			0-6 0.07		
		WATERY AMBIENT MATERIAL	6-12 0.1		
15		TO 12-15 cm	12-18 0.13		
			18-24 0.13		
		25-30 cm TRANSITION SPC MOIST	24-30 0.11		
30		TO DEEP DENSE	30-36 0.14	A	8.0
		- PERHAPS CLOSER TO 25 cm	36-42 0.21	B	8.0
			42-48 0.2	C	7.4
45			48-54 0.25	D	10.6
			54-60 —	E	13.2
			60-66 0.27	F	9.9
60			66-72 0.31	G	8.4
			72-78 0.28	H	8.6
			78-84 0.25	I	8.2
75			84-90 0.23	J	9.5
			90-96 0.3	K	11.9
			96-102 0.28	L	10.3
90			102-108 0.33	M	8.7
			108-114 0.38	N	9.7
			114-120 0.31	O	7.6
105			120-126 0.27	P	9.3
					weight includes tin
120					
135					
150					
165			GS: A,B,C,D Pb: A,B,C,D		
180					

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE	CORE ID: 3-2
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15	3	LIGHT BROWN/TAN w/ SOME MEDIUM TO FINE SAND SOFT SILT
30	6	TRANSITIONS @ 8cm
45	9	BROWN SOFT SILT w/ TRACE FINE SAND
60	12	SOME SHELL FRAGMENTS
75	15	
90	18	
105	21	
120	24	
135	27	
150	30	
165	33	32cm EOC
180		

Actual wts

0-6 0.5-0.2=910

6-12 0.8-0.2=0.16

12-18 1.2-.2=0.24

18-24 2.0-.2=0.4

24-30 2.3-.2=0.46

WEIGHT (g)

A	6.7 g
B	6.9 g
C	6.6
D	7.0
E	7.1
F	7.0
G	6.9
H	7.2
I	7.1
J	7.1

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

3-3

0-3
3-6
6-9
9-12
12-18
18-24
24-30

} S.G. @ Attleboro

	Client: U.S. ACE	**CORE ID:** 3-3
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15	3	TOP 5-cm SOFT DARK BROWN
30	6	
45	9	
60	12	
75	15	REMAINING DARKER, DENSER
90	18	
105	21	
120	24	
135	27	← EOC 27-cm
150		
165		
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 04-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR Kg/cm²
	0	TAN/LIGHT BROWN SOFT SILT W/ TRACE FINE SAND	0-6cm - 0.4·0.2 = .08
15	3		6-12cm - 1.2·0.2 = .24
30	6		12-18cm · 1.6·0.2 = .32
		BROWN SOFT SILT W/ TRACE FINE SAND	18-24cm - 2.6·0.2 = .52
45	9		
60	12		WEIGHT (g) ACTUAL
			A 6.2
			B 6.3
			C 6.9
			D 7.2
			E 7.0
75	15		F 6.7
90	18		G 6.8
			H 7.4
105	21		I 7.6
		BLACK STREAK 23-26 cm	
120	24	ROCK @24cm	
135	27	27.5 EOC	
150	30		
165			
180			

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

4-2

0-3

3-6

6-9

9-12

12-18

18-24

24-30

	Client: U.S. ACE			CORE ID: 4-2
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: RMC		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
	0	TAN/LIGHT BROWN "LOOSE" SOFT SILT w/ SOME FINE SAND
15	3	TO 5cm
30	6	LIGHT BROWN SOFT SILT w/ SOME FINE SAND
45	9	SOME TAN STREAKS
60	12	
75	15	
90	18	
105	21	
120	24	START/SLIGHT AT DEPTH
135	27	
150	30	28cm EOL
165		
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

5-1

24-30
30-36
36-42
42-48
48-54

S.G. & Astrebury

Also ^{210}Pb & CAN

	Client: U.S. ACE		CORE ID: 5-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANESHEAR (0.2 Lbd) Kg/cm²
		WATERY AMBIENT MATERIAL	0-6 0.02
15		TO 12-15 cm	6-12 0.07
			12-18 0.13
		25-30 cm TRANSITIONS SURFACE	18-24 0.18
30		MOIST TO DEEPER DENSE	24-30 0.15
			30-36 0.21
			36-42 0.17
45			42-48 0.20
		NO READING	~~48-54 0.21~~
			54-60 0.28
60		AT	60-66 0.26
		48-54	66-72 0.25
		SPANS	72-78 0.27
75			78-84 0.25
		2	84-90 0.26
		CORES	90-96 0.26
90			96-102 0.27
			102-108 0.35
			108-114 0.35
105			114-120 0.35
			120-126
120			
			MOIST 0-3, 3-6 .. 30
135			D: 30-36, 36-42, 42-48
			M: ALL LOWER TO 126
			PS ? 30 → 78
150			GS
			ARCHIVE 78-126 TO LG PLASTIC
165			
180			

SHIFT DOWN 1 INTERVAL

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 5-2
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: RMC		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
0	0	TAN/LIGHT BROWN SOFT SILT w/ TRACE FINE SAND
15	3	RED WORM @ 2cm
30	6	
45	9	WORM TUBE @ 8cm
60	12	
75	15	TRANSITION
90	18	TO
105	21	LIGHT BROWN SOFT SILT w/ TRACE SAND
120	24	
135	27	MUSSELL SHELL @ 28cm
150	30	30 cm EOC
165		
180		

VANE SHEAR Kg/cm2

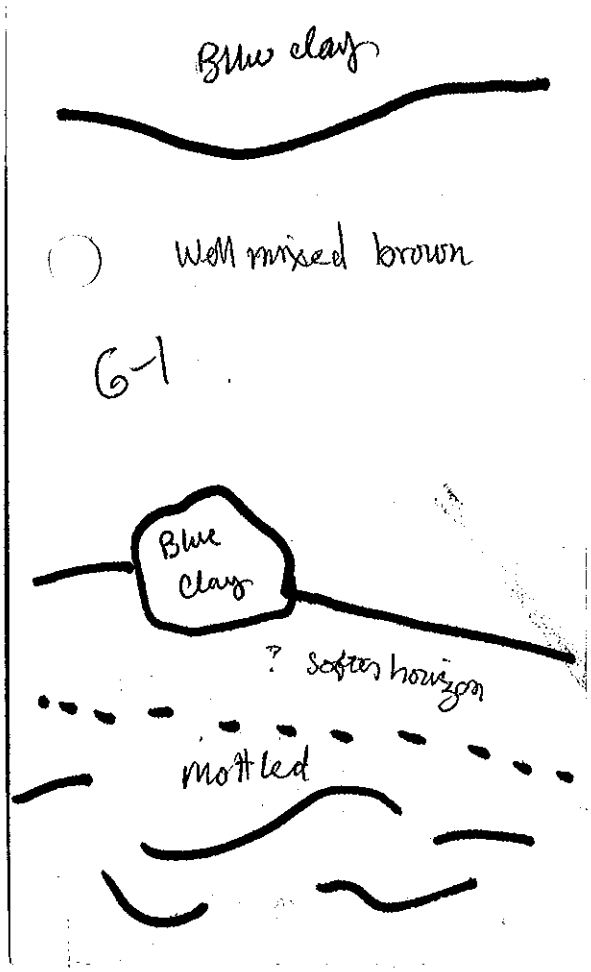
0-6	0.7 · 0.2 = 0.14
6-12	1.4 · 0.2 = 0.28
12-18	1.4 · 0.2 = 0.28
18-24	1.4 · 0.2 = 0.28
24-30	1.6 · 0.2 = 0.32

WEIGHT (g) ACTUAL

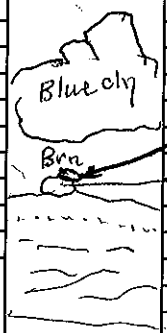
A	6.7
B	6.6
C	7.0
D	6.6
E	7.0
F	7.0
G	6.9
H	7.0
I	6.8
J	7.1

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):


Blue clay
Well mixed brown
6-1
Blue clay
? Softer horizon
mottled

	Client: U.S. ACE		CORE ID: 6-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
		FIRM BLUE CLAY CLAST
15		SFC TO 19.5 cm SITTING ON CURVED SURFACE
		TOP OF CLAST IS ~~PULLED INTO~~ COMPOSED
20		OF 3 CLASTS
		ANGULAR PEBBLE CONSOLIDATED CHUNK 6-19 cm "S" SFC
30		Brn Blue clay
30		ZONE 19-29 cm OF CONSOLIDATED LIGHT GREENISH BROWN
		WELL MIXED WITH ANOTHER CLAY CLAST (~1.5 cm)
45		AND ANGULAR PEBBLE ~1.0 cm DIA. SITTING ON THE
		CLAY CLAST AT BASE
46		
60		FOLLOWING 1-1.5 cm DENSITY Δ AND COLOR CHANGE TO MARBLED*
		FROM CLAST / PEBBLE @ INTERFACE TO 47 cm
75		IS MIX BROWN, LIGHT & DARK - SWIRL MOTTLED COLOR
		GRAY GREEN UNIFORM BELOW 47 cm
90	O shell	
81		HINGED SHELL AT 77 cm (NUCULA)
		↳ DRAGGED TO 81
105		
		*30-~~48~~ 47 cm = MARBLED COLORATION
120		↳ SWIRL OF BROWN COLORS LT/MED WITH
		VERY DARK INDICATIONS
135		
150		
165		
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE	**CORE ID:**
	Project Number: 9000-461	C6-1
	Station Number:	
	GPS Coordinates: See Logbook	Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay	Core Size (in.) 2.75-in OD
	Water Depth: MLW:	Time (Water Depth):
	Weather: See Logbook Seas: Logbook	Time (Coring):
Survey Vessel: Shanna Rose	Logged By: Date:	
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
15		I 9-15 cm	C6-1-DM	Boston Blue
30	M ↓	II 20-26 cm	C6-1-A	? DM OR TRANSLUCENT?
45		III 32-38	B	VANE SHEAR
		38-42		9-15 N/A
		39-45	C	20-26 0.25
60				32-38 0.30
		IV 48-54	D	39-45 0.31
75		54-60	E	48-54 0.38
		60-66	F	54-60 0.35
90		66-72	G	60-66 0.35
		72-78	H	66-72 0.35
105		78-84	I	72-78 0.36
		84-90	J	78-84 0.36
120		90-96	K	84-90 0.35
			ARCHIVE	90-96 0.40
135				
150				
165				
180				

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 7-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	CLUSTER OF CLASTS
15		~ UNCONSOLIDATED CLAY CLAST / PLUG CONTAINING PEBBLES 2-3 cm DIA ↳ LIKE CLAY CONGLOMERATE PEBBLE	
30		CLAY MATERIAL / MATRIX IS SOFT CONGLOM. TO 16 cm AND GRAY / GREEN SILT BELOW	
45		ANOTHER PEBBLE AT 21 ALSO 6 cm	12 cm
60		POSSIBLY ARTICULATED SHELL AT 21 31-40 cm FAINT MARBLING	
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			**CORE ID:** 7-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay			Core Size (in.) 2.75-in OD
	Water Depth:	MLW:		Time (Water Depth):
	Weather: See Logbook		Seas: Logbook	Time (Coring):
Survey Vessel: Shanna Rose		Logged By:	Date:	
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
			VANE SHEAR	
15	Dm	I 4-10		
	A	II 18-21	0.14	
30	B	21-24		
	C	24-27	0.18	
45		27-30		
60		30-36	0.22	
		36-42	0.20	
75		42-48	0.24	
		48-54	0.28	
90		54-60	0.24	
		60-66	0.25	
105	J			
120				
135				
150				
165				
180				

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE	**CORE ID:** E-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15	Sed 1	
30	Sed 2	
45		INTERFACE AT 38 cm
	A	38-41
	B	41-44
	C	44-47
60		47-50
		50-56 } E
75		56-62 F
		62-68 G
90	Archive	68-74 H
105		
120		
135		
150		
165		
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			**CORE ID:** B-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay			Core Size (in.) 2.75-in OD
	Water Depth:	MLW:		Time (Water Depth):
	Weather: See Logbook		Seas: Logbook	Time (Coring):
Survey Vessel: Shanna Rose		Logged By:	Date:	
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		0-4.5cm = LOOSE BOSTON BLUE CLAST AT	Stc
15		4.5 - 20cm VERY CONSOLIDATED CLAY CLAST WITH COLOR BANDING VARIABLE WIDTH	
30		20-35 cm CLAY IS MIXED WITH PEBBLES AND SAND	
45		LARGE PEBBLE AT 31 cm DEPTH (~2 cm DIA.)	
60		35-36 CURVED INTERFACE INTO UNIFORM GREY/GREEN SILT ~~clay~~	
75			Vaneshear
90		cm	38-44 0.19 44-50 0.15
105			50-56 0.21 56-62 0.16 62-68 0.16
120			68-74 0.23
135			
150			
165			
180			

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			**CORE ID:**
	Project Number: 9000-461			8-2
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
15		Top 30 cm Fine Consolidation	A = 30-36 } Archive B = 36-42 }
30			
45		30 - 40.5 cm uniform grey-green clay rich sediment to EOC at 40.5"	
60		· Few shell fragments · Few voids	
75			30-36cm - .18 36-42cm - .14
90			
105			
120			
135			
150			
165			
180			

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 9-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:		% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR
15		GROUP OF CLAY CLASTS 10 cm THICK ON EROSIONAL SFC UNDISTURBED	0-6 0.26 6-12 0.23 12-18 0.23 18-24 0.25 24-30 0.24
30		COMPETENT IMMEDIATELY BELOW TO EOC	30-36 0.27
45		SLIGHTLY REDUCED BROWN CLAST TO ABOUT 8 cm	
60			
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE		CORE ID: 10-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANESHEAR (0.2 Weel) KS/cm²
		8 cm CLAST of CLAY (BOSTON BLUE)	0-6 0.18
15		ON SLOPING EROSIONAL SFC	6-12 0.20
		SLIGHTLY REDUCED TO ~6 cm	12-18 0.20
			18-24 0.22
30		COMPETENT BELOW CLAST TO EOC	24-30 0.22
			30-36 0.26
45			
60			
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID:
	Project Number: 9000-461			11-1
	Station Number:			
	GPS Coordinates: See Logbook			Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay			Core Size (in.) 2.75-in OD
	Water Depth:	MLW:		Time (Water Depth):
	Weather: See Logbook		Seas: Logbook	Time (Coring):
Survey Vessel: Shanna Rose	Logged By:		Date:	
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:		% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR
			0-6 0.14
15		• PEBBLE (~ ½ cm) AT SURFACE	6-12 0.15
		• WASHED SURFACE	12-18 0.21
30		• COMPETENT RIGHT UP TO STC	18-24 0.23
		NOT NOTABLY REDUCED	24-30 0.24
45		BIOLOGICAL ARTIFACT AT 73 cm	30-36 0.24
		↳ FISH VERTEBRAE	
60		DIA. ≈ 1.5 cm	
		L by L = 1.2 cm	
75		• CLAY CLASTS OBSERVED 2-3 cm DIA	
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			**CORE ID:** 12-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
15		WASHED SURFACE, REDUCED AT THE S/C (NO SOUPY S/C LAYER)	
30		~~RECOVERED COMPETENT MAT~~. BECOMES COMPETENT BELOW 20	
45		REDUCED TO 10 MOTTLED 11-16 (DARK TAN)	
60		LIGHTER 16-23 w/ SOME MOTTLE SLIGHTLY DARKER 23-33 w/ BURROW MOTTLE 24 & 33	
75		DARK HORIZON 36.5-38 (ANGLED)	
90		UNIFORM GRAY/GREEN BROWN TO EOC WITH PARTING BAND AT 59	
105			VANE SHEAR
120			0-6 0.06 6-12 0.1 12-18 0.13 18-24 0.12
135			24-30 0.16 30-36 0.20
150			
165			
180			

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE	CORE ID: 13-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay	Core Size (in.) 2.75-in OD
	Water Depth: MLW:	Time (Water Depth):
	Weather: See Logbook Seas: Logbook	Time (Coring):
Survey Vessel: Shanna Rose	Logged By: Date:	
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15		SURFACE APPEARS WASHED, RETAINS A THIN FILM OF SOFT TAN MATERIAL
		REMIXED TO 7 cm
		LIGHT BAND TO 9 cm
30		14 cm EELGRASS STRAND
45		33-35 cm DARK BAND OBSERVED - SUBSAMPLE ABOVE THE BAND
60		
75		MOTTLED REMIXED TO 19 cm
		LIGHTER 22-26
90		MIXED HORIZON TO 33.5
		DARK BAND 33.5 - 35.5
105		UNIFORM GREEN/GRAY BELOW 35.5 cm
120		SHELL AT 54, 67
135		
150		
165		LOWER CORE SECTION CUT & ARCHIVED - NOT IMAGED
180..		

Competent Below 12-15

Vane shear

0-6	~~0.8~~	0.08
6-12	~~1.5~~	~~0.050~~
12-18	~~1.2~~	~~0.042~~
18-24	~~1.5~~	~~0.050~~
24-30	~~0.19~~	~~0.019~~
30-36		0.15

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

FLANK/Fringe North
on Ambient

	Client: U.S. ACE	**CORE ID:** 14-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
		*		
		1 cm FLUIDIZED MUD AT SURFACE		
		WITH 4.2 cm DIA. CLAST	Vanshear	
15				
		HORIZONTAL BANDING FROM SFC TO 7cm	0-6	0.1
			6-12	0.13
30		UNIFORM BELOW 7cm EXCEPT FOR	12-18	0.18
		SHELLS	18-24	0.18
			24-30	0.2
45		FIRMER 12-15	30-34	0.22
		QUITE FIRM / COMPETENT BELOW 22		
60		VERY UNIFORM TEXTURE		
75		SOME EVIDENCE OF WASHING		
		e.g. CLAST		
		MOST FLUIDIZED IS LOST		
90				
105				
120				
135				
150				
165				
180				

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

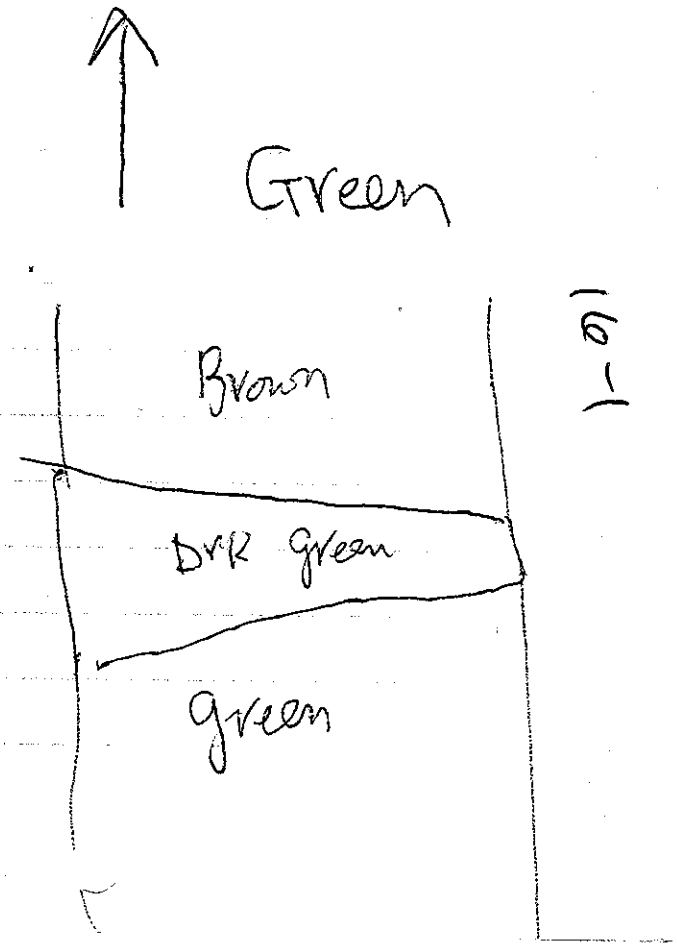
	Client: U.S. ACE			**CORE ID:** 15-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		Boston Blue Clay Peat at surface 0-7.5 cm	
15		Light Brown silt 7.5 to 26 cm	
		possibly "Firms up" at 26 cm	
30		Darker Grey/Green Brown.	
		Uniform to EOC at 76.5	
45			
		· Also shell remnant at 14 cm	
60			
75			
90			
105			Vane Shear
			0-6cm - 0.13
120			6-12 - 0.13
			12-18 - 0.15
135			18-24 - 0.16
			24-30 - 0.19
150			30-36 - 0.20
165			
180			

NOTES: Density tables from: A, C, E

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

Brown



	Client: U.S. ACE	**CORE ID:** 16-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15		0-5/6 cm DARK BROWN FINE SEDIMENT AT SURFACE on SLOPING COMMON 5cm LENGTH / 6 cm WIDTH
30		5/6 cm TO 33 cm SEDIMENT IS ~UNIFORM LIGHT GREY / GREEN
45		33-36 cm = DARKER BAND PERHAPS PART OF UNDISTURBED SLIGHT SECTION OF LIGHTER MATL AS ABOVE THEN THE SEDIMENT GRADES RAPIDLY INTO MED. GREY/GREEN CLAY, APPARENTLY UNIFORM TO EOC AT 127 cm
60		
75		
90		
105		
120		
135		
150		
165		
180		

33 cm may BE THE EROSIONAL SURFACE WITH RECENT / DISTURBED RE-SETTLED ABOVE

T1 - 0-6 (archive)
T2 - 12-18
T3 - 24-30
T4 - 30-36
A - 36-39
B - 39-42
C - 42-45
D - 45-48
E - 48-54
F - 54-60
G - 60-66 → archive
H - 66-72

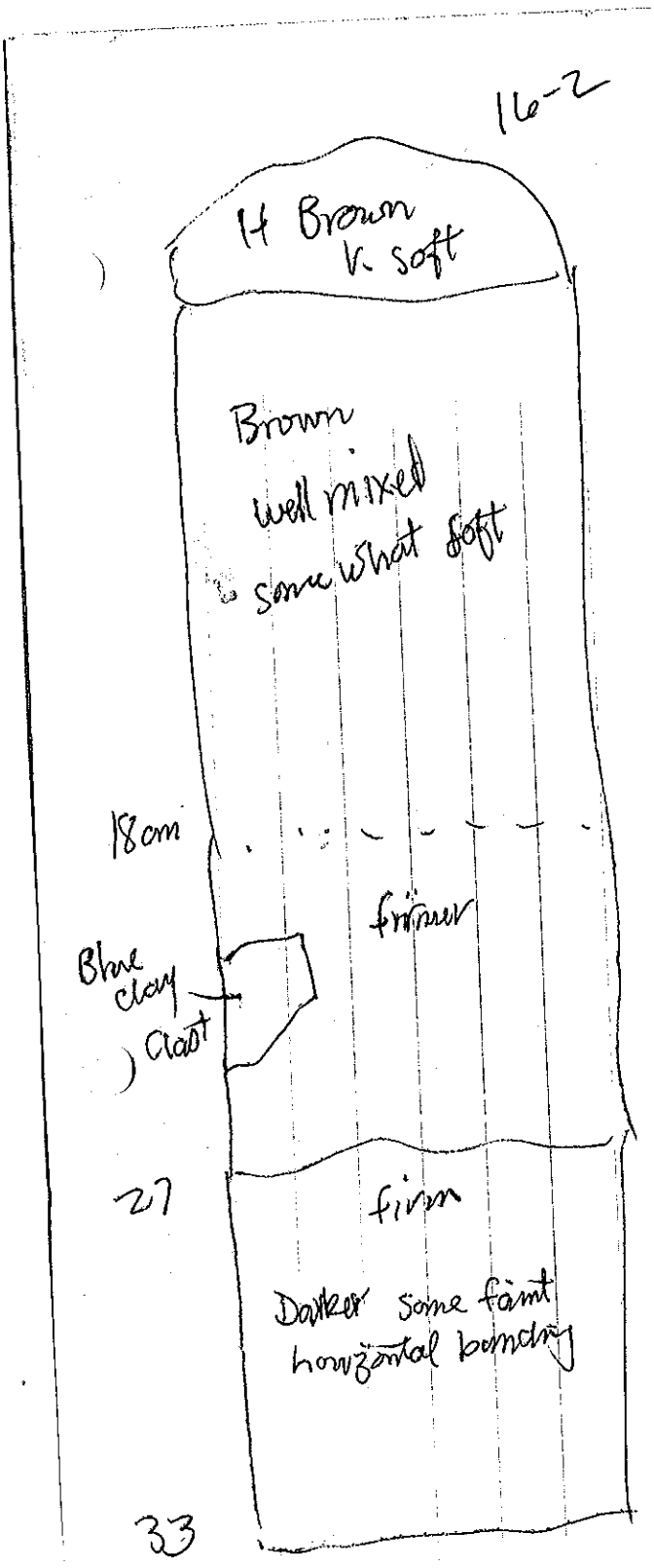
Vane Shear

0-6 - 0.0
6-12 - 0.05
12-18 - 0.06
18-24 - 0.10
24-30 - 0.10
30-36 - 0.12
36-42 - 0.13
42-48 - 0.16
48-54 - 0.116
54-60 - 0.19
60-66 - 0.19
66-72 - 0.19

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

16-2


14 Brown
v. soft
Brown
well mixed
somewhat soft
18cm
firmer
Blue
clay
clast
27
firm
Darker some faint
horizontal banding
33

Client: U.S. ACE		CORE ID: 16-2
Project Number: 9000-461		
Station Number:		
GPS Coordinates: See Logbook		Sheet: 1 of 2
Geographic Reference: Massachusetts Bay	MLW:	Core Size (in.) 2.75-in ID
Water Depth:	Seas: Logbook	Time (Water Depth):
Weather: See Logbook	Date:	Time (Coring):
Survey Vessel: Shanna Rose	Logged By:	
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery:	% Recovery: No. Attempts:

Displaced material on top? mixed with OM

Depth (cm)	SKETCH	DESCRIPTION
0 3	LT BRN	0-2cm MEDIUM/LIGHT BROWN SOFT SEDIMENT W/ gravel 2 pieces 1cm & 2cm
15	GREY/GREEN	2-25.5cm GREY/GREEN SEDIMENT/FINE WITH BOSTON BLUE CLAY CLAST AT CM. 20-24cm ~4cm x 2cm
30		MATERIAL FIRMS UP ~ 25.5cm (BASED ON SURFACE MOISTURE)
45	B. BLUE CLAY	25.5-36cm SLIGHTLY DARKER GRAY/GREEN
60	25.5 2cm DARKER (V. SUBTLE)	36-106.5cm (EOC) NEARLY UNIFORM GREY/GREEN FINE CLAY/RICH SEDIMENT
75	36	
90	~UNIFORM GRAY/GREEN	
105		
120	106.5 EOC	
135		
150		
165		
180		

0-3

Sampling Interval:

0-3 cm	A
3-9	B
9-15	C
15-21	D
24-30	E
30-36	F
36-42	G
42-48	H
48-54	I
54-60	J
60-66	K
66-72	L
72-78	M
90-96	N

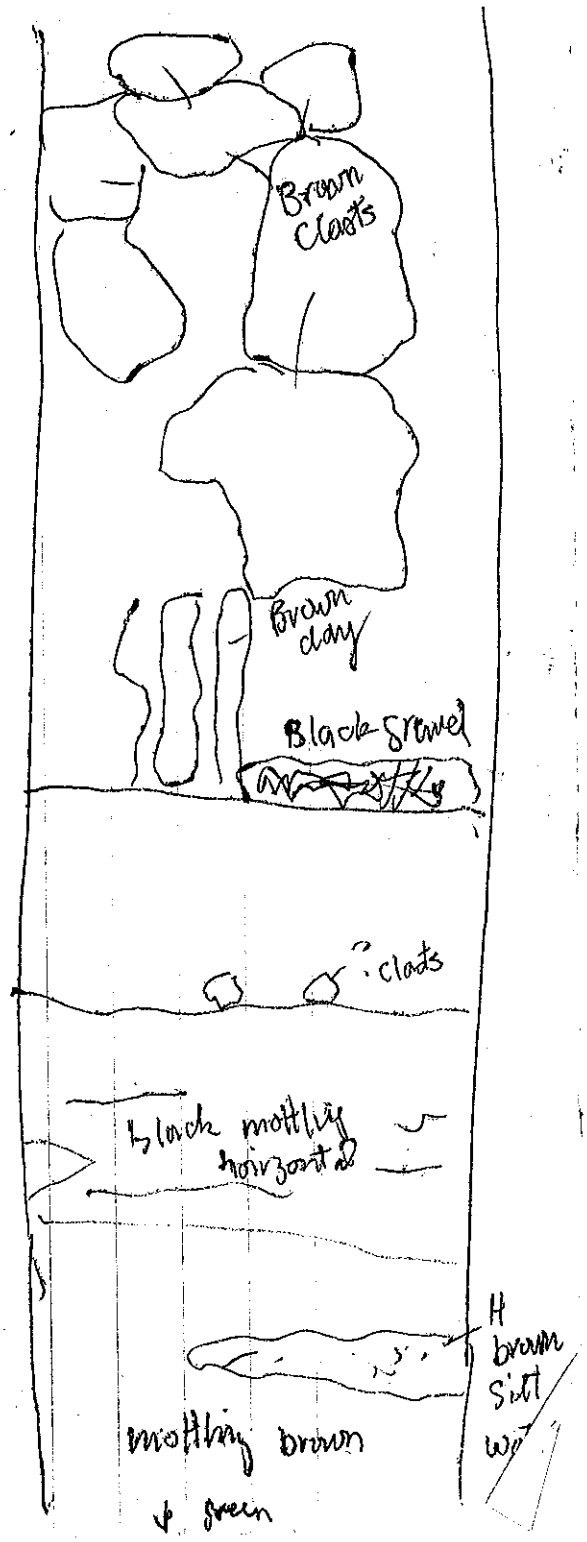
ARCHIVE

Vaneshear:
0-6-0.02
6-12-0.03
12-18-0.05
24-30-0.13
30-36-0.14
34-42-0.14
42-48-0.15
48-54-0.18
54-60-0.16
60-66-0.18
66-72-0.20
72-78-0.23
78-84-0.26
84-90-0.23
90-96-0.25

NOTES:

Unpenetrated Barrel/Cable Length (A): Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B): Recovered Core Length (D):

17-1



16-2

B 0-3
D 3-9
C 9-15
D 15-21
AVOID CLAST SECTION

~~25-30~~
E ~~[illegible]~~ 24-30
F ~~32-36~~ 30-36
G 36-42
H 42-48
I 48-54
J 54-60
K 60-66
L 66-72
M 72-78
~~[illegible]~~
N 90-96

ARCHIVE

	Client: U.S. ACE			CORE ID: 17-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay	MLW:		Core Size (in.) 2.75-in ID
	Water Depth:		Seas: Logbook	Time (Water Depth):
	Weather: See Logbook	Logged By:	Date:	Time (Coring):
Survey Vessel: Shanna Rose				
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm) | SKETCH | DESCRIPTION



0-21cm IS APPARENTLY DISLOCATED SEDIMENT PARTIALLY COHERENT SITTING ON AN ANGLED CONTACT

DISLOCATED SEDIMENT IS A MIX OF BROWN AND GREEN/GRAY

BLACK PATCH AT 20-21.5 cm CONTAINING FEW EARLE/GRAIN GRAINS

21.5-27 cm LIGHT BROWN SEDIMENT SEEN WITH DARKER STAINED (HETEROGENEOUS) BOUNDARY

THEN LIGHT BROWN 33-35.5 cm AND VERY LIGHT BROWN HORIZON AT 35.5-37 cm

THEN LIGHT BROWN 37-43 cm THEN GRADING INTO GRAY/GREEN BY 46 cm

46cm TO EOC IS A UNIFORM GRAY/GREEN

ALSO A BLACK PATCH APPEARS - OVAL IN SHAPE 54.5-56.5 cm - BURROW-LIKENESS OVERALL DIMENSION 2.5 x 1.5 cm

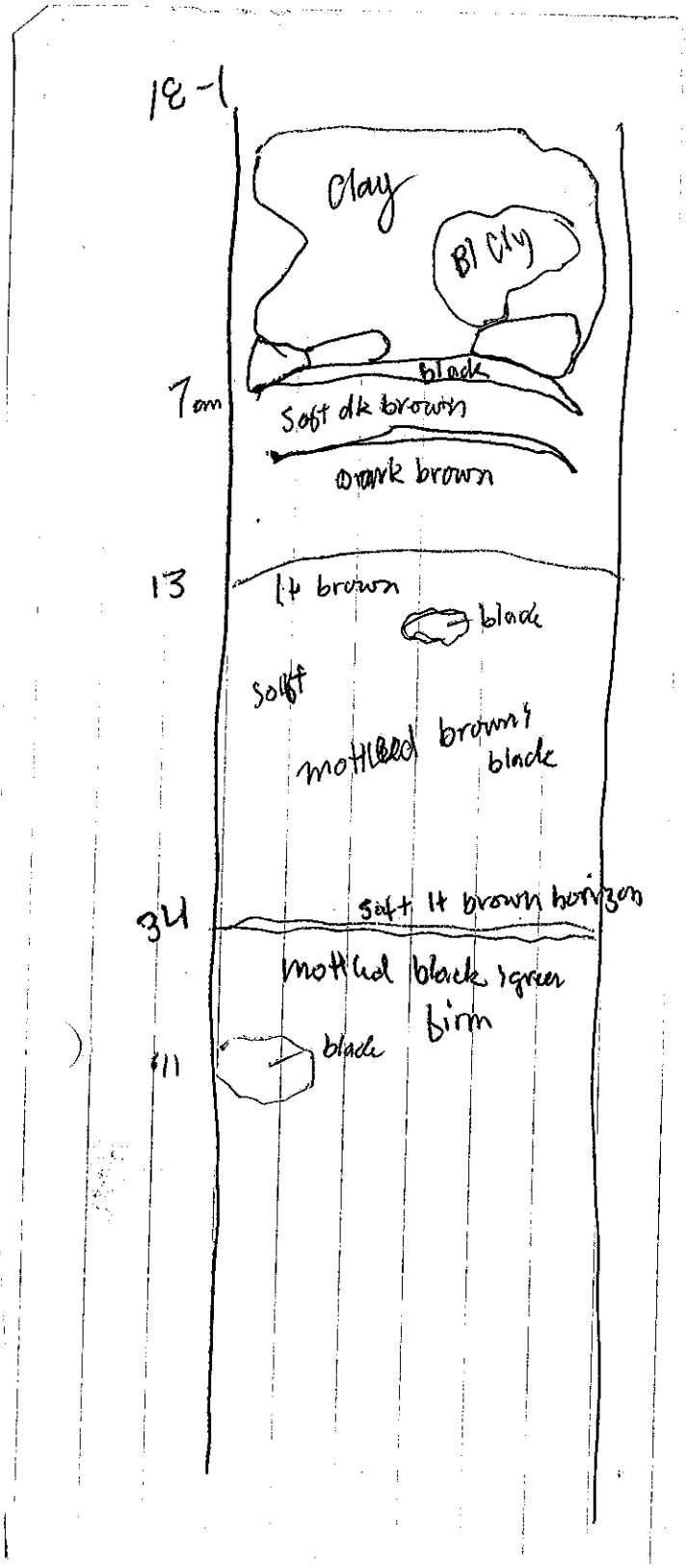
DM1-0-18cm (angle)
DM2-18-22cm
A-22-25 (D)
B-25-28
C-28-31 (D)
D-31-34
E-34-40 (D)
F-40-46
G-46-52
H-52-58
I-58-64
J-64-70
K-70-76 → Archive
L-76-82

Vane Shear

22-28 - 0.09
28-34 - 0.12
34-40 - 0.12
40-46 - 0.15
52-58 - 0.17
58-64 - 0.21
64-70 - 0.16
70-76 - 0.19
76-82 - 0.19

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):


18-1
Clay
Bl Clay
7cm
blade
Soft dk brown
dark brown
13
lt brown
blade
soft
mottled brown & blade
34
soft lt brown horizon
mottled black & green
firm
111
blade

	Client: U.S. ACE			CORE ID: 18-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
		0-5 cm MIX OF SOFT BROWN AND BOSTON BLUE CLAY
15		5-11 cm BROWN & BLACK
		11-34 BROWN - NEARLY UNIFORM
30		AT 34 cm THIN VERY LIGHT BROWN HORIZON
		BELOW 34 cm GREY/GREEN, NEARLY UNIFORM
45		WITH BURROW MOTTLES 46-48 cm
		BELOW DM MIX →
60		A 0-6
		B 6-12
		C 12-18
		D 18-23
75		E 23-29.5
		F 29.5-35
		G 35-41
90		H 41-47
		I 47-53
105		
		Vane Shear
120		0-6 - 0.02
		6-12 - 0.05
		12-18 - 0.07
135		18-23 - 0.09
		23-29.5 - 0.12
150		29.5-35 - 0.12
		34-41 - 0.13
		41-47 - 0.13
165		47-53 - 0.14
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

FLANK OF SINGLE CRATER

	Client: U.S. ACE		CORE ID: 19-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in OD
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		90+ cm FAIRLY WATERY	SEE PHOTO'S
15		CLAY, REDUCED & BROWN SILT BLOCKS	
		w/ DISTINCT BOSTON BLUE CLAY/CLAST	
30		AT SURFACE	
			0-6 0.07
			6-12 0.1
45			12-18 0.12
			18-24 0.15
			24-30 0.13
60			30-36 0.16
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE		CORE ID: 20-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		UNEVEN SFC w/ 1cm BLUE CLAY CLAST	
		SOME SOFT BROWN - THIN - VERY SOFT	
15		0-2 cm SLIGHTLY REDUCED MATERIAL	
		FIRMS UP ~ 8cm	
30		FAINT MOTTLING 12-15 cm	
		LIGHT BROWN HORIZON AT 29cm (3/4 cm THICK)	
45		↳ MAY BE HIGHER WATER CONTENT	
		FAINT MOTTLING 30-50 cm	
60		THIN BLACK BAND AT 53 cm	
		↳ LAYER OF PARTICLES? - SEE PHOTOGRAPH	
75		PERHAPS HIGHLY REDUCED / SULFIDE LAYER ~~VERY VERY THIN~~ (1)	
90		FAINT MOTTLING BELOW BUT GENERALLY	
		UNIFORM GRAY / GREEN TO EOC AT 146.5	
105			
120			
		1 ~1 cm HORIZON MIX OF VERY DARK, BLACK	LIKELY NOT A BURROW
135		PARTICLES AND SILT	
		↳ LAYERING WITHIN	
		SEEMS TO REPRESENTS SOME HISTORICAL EVENT	Vainshear
150			0-6 - 0.06
			6-12 - 0.10
			12-18 - 0.12
165			18-24 - 0.14
			24-30 - 0.12
			30-36 - 0.14
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

20-1

Client: U.S. ACE
Project Number: 9000-461
Station Number:
GPS Coordinates: See Logbook
Geographic Reference: Massachusetts Bay
Water Depth: MLW:
Weather: See Logbook Seas: Logbook
Survey Vessel: Shanna Rose Logged By: Date:
Survey Personnel: See Logbook
Sampling Equipment: See Logbook
Estimated Penetration Range: Project Depth :
Actual Penetration): Recovery: % Recovery: No. Attempts:

CORE ID: 20-1

Sheet: 1 of 2
Core Size (in.) 2.75-in ID
Time (Water Depth):
Time (Coring):

Depth (cm)	SKETCH	DESCRIPTION		
		Can #	Can + Wet	Can + Dry
15		20-1-B	5.45 g	
30		20-1-A	5.82 g	
45		20-1-C	6.57 g	
60		20-1-E	7.92 g	
75		20-1-D	8.36 g	
90		20-1-F	6.52 g	
105		20-1-G	8.83 g	
120		20-1-H	6.21 g	
135				
150				
165				
180				

NOTES:

Unpenetrated Barrel/Cable Length (A): Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B): Recovered Core Length (D):

	Client: U.S. ACE		CORE ID: 21-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		3½ x 4 x 1 cm piece of granite / igneous	
		sitting at sfc	
15		· v. thin layer of lt brown sediment	
		at sfc.	
		Also several embedded pebbles	
30		· 3 cm flat	
		imbricated layer of pebbles with soft layer of thin oxidized	
		sediment at surface	
45		· Landed independent of large clay chunks	
		Darker brown horizon to 4 cm	
60			
		Uniform grey green below	Pebbles
			· 3 cm
75		Faint mottling @ 21-23 cm	· 2 cm
			· ½ cm x 2
90		· Appears washed (firms up at ca. 6 cm)	
		Competent below 6 cm	
105			Vein sheet
			0-6 0.06
			6-12 0.09
120			12-18 0.11
			18-24 0.12
			24-30 0.14
135			30-36 0.14
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

21-1	Client: U.S. ACE			**CORE ID:** 21-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
		CAN #	CAN + WET	CAN + DRY
15		21-1-F	7.24	
		21-1-E	7.51	
30		21-1-D	7.13	
		21-1-H	7.97	
45		21-1-G	8.03	
		21-1-C	5.71	
60		21-1-B	5.38	
		21-1-A	7.35	
75				
90				
105				
120				
135				
150				
165				
180				

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

22-1	Client: U.S. ACE		CORE ID: 22-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay		Core Size (in.) 2.75-in ID
	Water Depth:	MLW:	Time (Water Depth):
	Weather: See Logbook	Seas: Logbook	Time (Coring):
Survey Vessel: Shanna Rose	Logged By: DL	Date:	
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		LARGE 3.5 cm CLAY CLAST AT SURFACE	
		ALSO SMALLER 1.5 cm " " " "	
15			Vane shear
		VERY FINE / THIN LAYER OF OXIDIZED	
		LT. BROWN AT SURFACE	0-6 - ~~0.8~~ 0.08
30			6-12 - ~~0.9~~ 0.09
		3-4 cm LAYER OF DARKER (BRN) REDUCED	12-18 - 0.14
		SEDIMENT BELOW	18-24 - 0.15
45			24-30 - 0.15
		4 cm - 20 cm MOTTLED GREEN/GRAY	30-36 - 0.17
60		COMPETENT BELOW 20 cm	
		MINOR MOTTLING CONTINUES TO ABOUT 35 cm	
75		THEN UNIFORM GREEN BELOW	
		WITH SHELL FRAGMENT AT 46 cm	
		PATCH OF DARK SEDIMENT AT 74	
90		BAND OF " " AT 101.5 - 103.5	
		SHELL FRAGMENT AT 99 cm	
105		UNIFORM GREEN/GRAY BELOW BAND	
		TO EOC AT 128 cm	
120			
		82.5 - 83.5 DARK CLAST (?) SOFTER THAN	
135		SURROUNDING (GREEN) CLAY RICH MATRIX	
150			
165			
180			

NOTES: Density collected at A, C, E

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

22-1	Client: U.S. ACE			CORE ID: 22-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
		CAN #	CAN + WET	CAN + DRY
15		22-1-C	7.39	
30		22-1-B	6.80	
45		22-1-F	7.38	
60		22-1-A	7.16	
75		22-1-E	7.72	
90		22-1-D	8.73	
105		22-1-H	7.61	
120		22-1-G	7.45	
135				
150				
165				
180				

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			**CORE ID:** 23-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	∅ TOP OF CLAY DESCRIPTION	
		ca. 10 cm CLAY CHUNK AT SURFACE THRU-OUT RESTING ON COARSER "AMBIENT"	- COHERENT S.F.C.
15			
		DARK BROWN IMMEDIATELY UNDER CLAY GRADING INTO MOTTLED GRAY GREEN & THEN UNIFORM COLOR AT DEPTH	
30			
		COMPETENT BELOW 30 cm (20 cm FROM	
45		INTERFACE	
		MOTTLING ENDS AT ABOUT 27 cm WITH	
60		FEW PATCHES BENEATH :	
		· DARK PATCH ~ 1 cm DIA AT 70.5	
75		· " " ~ 1½ AT 43 cm	
		VERY LIGHT MOTTLING IN CLAY RICH	
90		MATERIAL ~ 45-60 cm	
		~~LIGHT~~ FAINT BAND AT 77.5 TO 79.5 cm	
105			
		UNIFORM GRAY GREEN TO EOC AT	133 cm
120			
			Vane shear
135			0-6 - 0.13 6-12 - 0.15 12-18 - 0.15 18-24 - 0.16 24-30 - 0.16 30-36 - 0.22
150			
165			
180			

NOTES: Density collected @ A, C, E

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

23-1	Client: U.S. ACE	CORE ID: 23-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
		CAN #	CAN + WET	CAN + DRY
15		23-1-H	9.24	
30		23-1-G	9.32	
45		23-1-E	8.30	
60		23-1-F	8.43	
75		23-1-C	8.18	
90		23-1-D	6.85	
105		23-1-A	7.82	
120		23-1-B	8.48	
135				
150				
165				
180				

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: Z4-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-In OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	JANE SHEAR
15		13 cm CLAST OF BUFF BLUE CLAY SITTING ON EROSIONAL / DEFORMED	SURFACE
30		3 cm OF SLIGHTLY REWORKED HORIZON AT INTERFACE	0-6 0.15 6-12 0.17
45		COMPETENT FROM INTERFACE TO EOC	12-18 0.25 18-24 0.23 24-30 0.25 30-36 0.25
60			
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

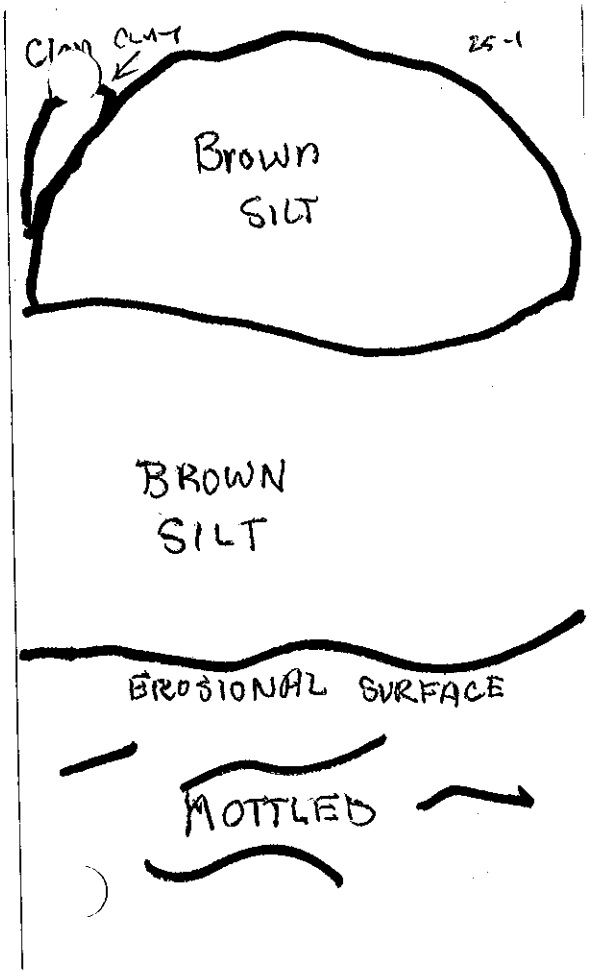
	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			**CORE ID:** 25-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:		% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
15		1ST TRANSLUCENT "CHUNK 0-6 cm WITH OLIVE FRAGMENTS ALONG ONE EDGE	GREY/GREEN
30		2ND TRANSLUCENT "CHUNK" 6-11.5 cm ALSO GREY GREEN - (LIKELY SAME PARENT MAT'L ?)	
45		11.5 - 15 cm IS DARKER-BROWN - REDUCED LAYER	
60		15 - 18 UNIT IS MOTTLED GREEN/DARK MOISTURE / DENSITY INTERFACE APPEARS TO BE AT 18 cm	
75		18-26 cm UNIFORM GREEN/GREY THEN FEW SMALL DARK PATCHES AT 26-31 cm	
90		THEN UNIFORM GREEN/GREY TO EOC AT 127 cm	
105		• ALSO WORM TUBE AT AT 49 cm	
120			
135	EOC 127 cm		
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):


Clay Cut
25-1
Brown
Silt
BROWN
SILT
EROSIONAL SURFACE
MOTTLED

	Client: U.S. ACE			CORE ID: 25-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		LABEL AS 25-1-T1, 25-1-T2	
15		I 25-1-TRANSLOCATION 1 FULL SET	Vane shear
30		II 25-1-TRANSLOCATION 2 FULL SET	0-6 - 0.04 6-12 - 0.08 12-18 - 0.11 18-24 - 0.15 24-30 - 0.15 30-36 - 0.15 36-42 - 0.17 42-48 - 0.16
45		III 25-1-A 25-1-B etc.	
60			
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

25-1

Client: U.S. ACE
Project Number: 9000-461
Station Number:
GPS Coordinates: See Logbook
Geographic Reference: Massachusetts Bay
Water Depth: MLW:
Weather: See Logbook Seas: Logbook
Survey Vessel: Shanna Rose Logged By: Date:
Survey Personnel: See Logbook
Sampling Equipment: See Logbook
Estimated Penetration Range: Project Depth :
Actual Penetration): Recovery: % Recovery:

CORE ID: 25-1

Sheet: 1 of 2
Core Size (in.) 2.75-in ID
Time (Water Depth):
Time (Coring):
No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
		Can #	Can + Wet	Can + Dry
15		25-1-C	5.48	
30		25-1-F	7.10	
45		25-1-E	7.34	
60		25-1-H	7.81	
75		25-1-G	6.67	
90		25-1-D	6.42	
105		25-1-T1	6.81	
120		25-1-A	5.16	
135		25-1-B	5.33	
150		25-1-T2	6.07	
165				
180				

NOTES:

Unpenetrated Barrel/Cable Length (A): Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B): Recovered Core Length (D):

	Client: U.S. ACE			**CORE ID:** 26-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	ϕ = TOP OF CLAY DESCRIPTION	
		SMALL CLAY RUBBLE AT SURFACE WITH UNEVEN CONTACT	
15		CLAST	
		WASHED SURFACE, COMPETENT BELOW CLAST	
30		ANOTHER CLAST DRAG-DOWN	
		0-4 OR 5 cm DARKER BROWN MOTTLED	
45		FOLLOWED BY LIGHTER BROWN TO 16cm	
		THIN MOTTLED AGAIN TO ~23cm	
60		DARK BROWN OVOID PATCH (BURROW)	
		UNIFORM GREY/GREEN BELOW TO	
75		EOC AT 125cm	
90			
		+ ALSO MANY EEL GRASS AT 83 cm	
105		- INTERMITTENT SHELL FRAGMENTS	
		38cm	
120		22cm	Vaneshear
			0-6 - 0.11
135			6-12 - 0.13
			12-18 - 0.18
150			18-24 - 0.16
			24-30 - 0.18
165			30-36 - 0.20
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

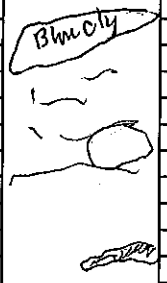
26-1	Client: U.S. ACE			**CORE ID:** 26-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION		
		Can #	Can+wet	Can+Dry
15		26-1-G	6.95	
30		26-1-E	7.85	
45		26-1-F	6.59	
60		26-1-H	7.12	
75		26-1-A	6.24	
90		26-1-D	6.30	
105		26-1-B	6.94	
120		26-1-C	7.23	
135				
150				
165				
180				

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 27-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
15		Blue clay clast 0–4 0–7 Mottled brown silt 7– 19 cm 19–21 green silt 21–24 ~~mottled dark brown silt~~ orange layer on top mottled green silt 46 Reduced horizon appears to have Halo around it 2 cm ~4 cm uniform green silt thin black line at 50
30		
45		
60		
75		
90		
105		
120		
135		
150		
165		
180		

DENSITY SHIFT PERHAPS ~20 cm

VANE SHEAR
0-6 - 0.12
6-12 - 0.15
12-18 - 0.18
18-24 - 0.20
24-30 - 0.20
30-36 - 0.19

EOC 149

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

Single critter on flank

	Client: U.S. ACE			CORE ID: 28-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
15		Washed Surface no soft brown layer	
		thin black line at 1 cm	
30		thin black line at 5 cm | faint mottling	
		No mottling – grey green silt to bottom of core	
45		below 20	EOC at 147 cm
60			Vane Shear 0-6 - 0.07 6-12 - 0.10 12-18 - 0.12 18-24 - 0.14 24-30 - 0.14 30-36 - 0.15
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 29-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		SMALL CLAY CLASTS INTERMIXED AT SURFACE	w/IN "AMBIENT"
15		VERY THIN OXIDIZED LAYER ALSO PERHAPS DISPLACED MAT'L	
		SOME ALTERNATING LT/DK/LT	
30		ALL WITHIN UPPER 2cm	
		2-4 MOTTLED HORIZON ~~MORE~~ OR LAYERED	
45		2-10 = DARK MOTTLED ZONE	
		10cm DENSITY CHANGE	
60		PLANT FRAGMENT & TINY GRAIN ALSO AT 10 cm	
		10-24 LIGHTER MOTTLED ZONE	
75		~UNIFORM GRAY/GRN	
		THIN 33-34 cm DISCONTINUOUS DARK LAYER/PATCH	
90		UNIFORM BROWN TO EOC AT 126 cm	
105			
			Vanesher
120			0-6 - 0.13
			6-12 - 0.13
135			12-18 - 0.13
			18-24 - 0.15
150			24-30 - 0.18
			30-36 - 0.19
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

29-1	Client: U.S. ACE		CORE ID: 29-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		CAN #	CAN + WET
15			
		29-1-G	7.92
30		29-1-~~A~~ H	9.93
		29-1-E	7.15
45			
		29-1-F	8.46
60		29-1-D	7.10
		29-1-A	6.52
75			
		29-1-C	6.30
90		29-1-B	6.56
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 30 - 1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR	
15		WASHED SURFACE, NO SIGN OF REDUCTION COLORATION		
30		10 CM OF UNEVEN UPPER WASHED SURFACE	0-6	0.06
			6-12	0.1
45		COMPETENT FROM SURFACE TO EOC	12-18	0.12
			18-24	0.15
60			24-30	0.17
			30-36	0.15
75				
90				
105				
120				
135				
150				
165				
180				

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 31-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in OD
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose		Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:		Project Depth :		
Actual Penetration):		Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR
15		15 cm MIXED - MOSTLY CLAY CLAST ON UNEVEN EROSIONAL SURFACE	0-6 0.19 6-12 0.22
30		SLIGHTLY REDUCED ?	12-18 0.25 18-24 0.26 24-30 0.26
45		COMPETENT FROM INTERFACE TO EOC	30-36 0.21
60			
75			
90			
105			
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE	CORE ID: 32-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration): .	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
	for consol testing	
15		9–45 Faint mottling brown to dark brown throughout core most noticeable 9–45
30		
45		46–61 – artifact from wire on surface
60		62–100 v. faint mottling
75		100–151 traces of mottling
90		
105		
120		
135		
150		
165		
180		

A
B } not sampled then for consolidation
C
D – 9–12 cm
E – 12–18 cm
F – 18–24 cm
G – 24–30 cm
H – 30–36 cm.

Vane shear
9–15 – 0.10
15–21 – 0.12
21–27 – 0.14
27–33 – 0.13
33–39 – 0.18

NOTES:

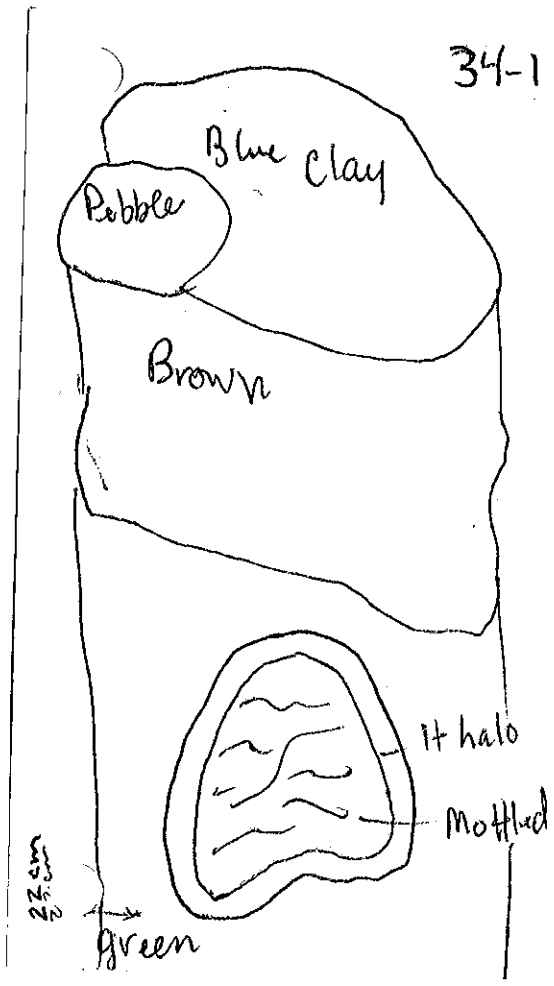
Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE	**CORE ID:** 33-1
	Project Number: 9000-461	
	Station Number:	
	GPS Coordinates: See Logbook	
	Geographic Reference: Massachusetts Bay	Sheet: 1 of 2
	Water Depth: / MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook / Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By: / Date:	Time (Coring):
Survey Personnel: See Logbook		
Sampling Equipment: See Logbook		
Estimated Penetration Range:	Project Depth :	
Actual Penetration):	Recovery: / % Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
		TOP 30 cm FOR CONSOLIDATION
15		UNIFORM GREY/GREEN THRU-OUT
		30 cm
30		A = 30-36 B = 36-42 } ARCHIVE
45		
60		Vaneshear
75		30-36 - 0.36 36-42 - 0.32
90		
		TO EOC 127 cm
105		
120		
135		
150		
165		
180		

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):


34-1
Blue clay
Pebble
Brown
1t halo
Mottled
22.5cm
green

	Client: U.S. ACE		CORE ID: 34-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION
		BLUE CLAY CLAST 7cm LONG, WRAPPED AROUND
		A ROUNDED QUARTZITE, 4cm DIA. 3cm TO 6cm
15		PEBBLE
		↳ CLAY CONTACT UPPER, DARKER SILT LOWER ^(SANDWICHED)
30		BROWN MOTTLED LAYER OF SILT - MOTTLING IS VERY
		7cm TO 13 cm FINE SCALE
45		SLANTED INTERFACE TO GREY/GREEN SILT
		TO 13 - 16.5 cm
60		THE CLAST OF MOTTLED, 5.5cm x 3 cm
		MATERIAL - WITH HALO
		· DARK/MEDIUM BROWN MOTTLING
75		· LIGHT BROWN HALO
		BOTTOM OF CLAST AT 22cm
		22 - 29.5 cm GREY/GREEN SILT
90		WITH SWIRLS, SUGGESTIONS OF CLASTS, SOME
		VERY LIGHT GREY GREEN, SURROUNDED
		(29.5 SHELL LINE) BY BROWNISH SILT SWIRLS
105		
		29.5 - 48 cm SIM.
		· SMALL AREAS BRN SILT
120		TO MORE SUBTLE SWIRLS · MORE GREY/GRN
		ANOTHER SHELL FRAGMENT HORIZON AT 48 cm
135		
		~~MORE~~ UNIFORM GREY/GREEN BELOW 48 cm
		TO EOC AT 121 cm
150		BURROW ~~[illegible]~~ AT 86
165		ENTIRE CORE APPEARS COMPETENT / FAIRLY DENSE
180		

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE		CORE ID: 34-1
	Project Number: 9000-461		
	Station Number:		
	GPS Coordinates: See Logbook		
	Geographic Reference: Massachusetts Bay		Sheet: 1 of 2
	Water Depth:	MLW:	Core Size (in.) 2.75-in ID
	Weather: See Logbook	Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:	Date:	Time (Coring):
Survey Personnel: See Logbook			
Sampling Equipment: See Logbook			
Estimated Penetration Range:	Project Depth :		
Actual Penetration):	Recovery:	% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
		0-3 cm (ANGLED)	
		34-1 A ~~0-2~~ BELOW CLAY	
15		B 3-7 cm (ANGLED)	
		C 7-11	
30		D = CLAST ONLY WITHIN 11-18 INTERVAL - no grainsize no moisture CHN only + Pb only	
45		E 18-21	
		F 21-24.5	
60		G 24.5-29.5	
75		H 29.5-34.5	Vane shear
			3-9 - 0.17
		I 34.5-42	18-24 - ~~2.2~~ 0.22
90			24.5-29.5 ~~1.9~~ 0.19
		J 42-48.5	29.5-34.5 - 0.18
			34.5-42 - 0.22
105		K 48.5-55	42-48.5 - 0.20
			48.5-55 - 0.21
		L 55-61	55-61 - 0.21
120			61-67 - 0.20
		M 61-67	67-73 - 0.23
			73-79 - 0.24
135		N 67-73 } ARCHIVE	
		O 73-79	
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 35-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:		% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	
15		MODERATELY REDUCED AT SURFACE TO 3 cm 3-21 cm LIGHT BROWN MATRIX WITH PERIODIC DISCOLORED PATCHES. TEXTURE	INDICATIVE
30		PERHAPS OF LOOSER, REWORKED MAT'L	
45		21-28 cm SLIGHTLY DARKER BROWN MOTTLED 28 - 39 cm GREY GREEN - SLIGHTLY MOTTLED	APPROXIMATE DENSITY/COMPETENCY SHIFT 24-32 cm PERHAPS 2 TRANSITIONS 22 & 30
60		Brown clast at 28 cm	
75		Dark Horizon on diagonal at 38-41 cm	
90		UNIFORM GREY/GREEN BELOW DARK HORIZON WITH V. FEW DARK PATCHES TO EOC AT 127 cm	
105			Vaneshear
120			0-6 - 0.07 6-12 - 0.07 12-18 - 0.079 18-24 - 0.10
135			24-30 - 0.13 30-36 - 0.15
150			
165			
180			

NOTES:

	Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
	Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

	Client: U.S. ACE			CORE ID: 36-1
	Project Number: 9000-461			
	Station Number:			
	GPS Coordinates: See Logbook			
	Geographic Reference: Massachusetts Bay			Sheet: 1 of 2
	Water Depth:	MLW:		Core Size (in.) 2.75-in ID
	Weather: See Logbook		Seas: Logbook	Time (Water Depth):
Survey Vessel: Shanna Rose	Logged By:		Date:	Time (Coring):
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:	% Recovery:		No. Attempts:

Depth (cm)	SKETCH	0 = TOP OF CLAY DESCRIPTION	
		18 cm SECTION OF BLUE CLAY	
15		SITTING ON UNIFORM COLUMN OF	
		GREY/GREEN CLAY RICH MATERIAL TO	53 cm EOC
30			
		53 cm → 77 cm CUT FOR	
45		CONSOLIDATION TESTING	
60			Vaneshear
		BIVALVE - IN MET COLLECTED FROM	0-6 - 0.14
75		3 cm BELOW CAP INTERFACE	6-12 - 0.16
			12-18 - 0.18
90		BIVALVE IS ARTICULATED	18-24 - 0.18
			24-30 - 0.15
105			30-36 0.18
120			
135			
150			
165			
180			

NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

WITHIN CRATER ZONE

	Client: U.S. ACE			CORE ID:
	Project Number: 9000-461			37-1
	Station Number:			
	GPS Coordinates: See Logbook			Sheet: 1 of 2
	Geographic Reference: Massachusetts Bay			Core Size (in.) 2.75-in OD
	Water Depth:	MLW:		Time (Water Depth):
	Weather: See Logbook		Seas: Logbook	Time (Coring):
Survey Vessel: Shanna Rose	Logged By:		Date:	
Survey Personnel: See Logbook				
Sampling Equipment: See Logbook				
Estimated Penetration Range:	Project Depth :			
Actual Penetration):	Recovery:		% Recovery:	No. Attempts:

Depth (cm)	SKETCH	DESCRIPTION	VANE SHEAR	
			0-6	0.2
15		EROSIONAL / WASHED SURFACE	6-12	0.23
		REDUCED AT SURFACE w/ 2 SMALL	12-18	0.23
		CLAY CLASTS (2 OR MORE)	18-24	0.24
30			24-30	0.32
		LOOKS COMPETENT IMMEDIATELY	30-36	0.30
		BELOW CLASTS		
45				
		MIXED LAYERS OF REDUCED		
		LAYERS DOWN TO 20 cm		
60				
75				
90				
105				
120				
135				
150				
165				
180				

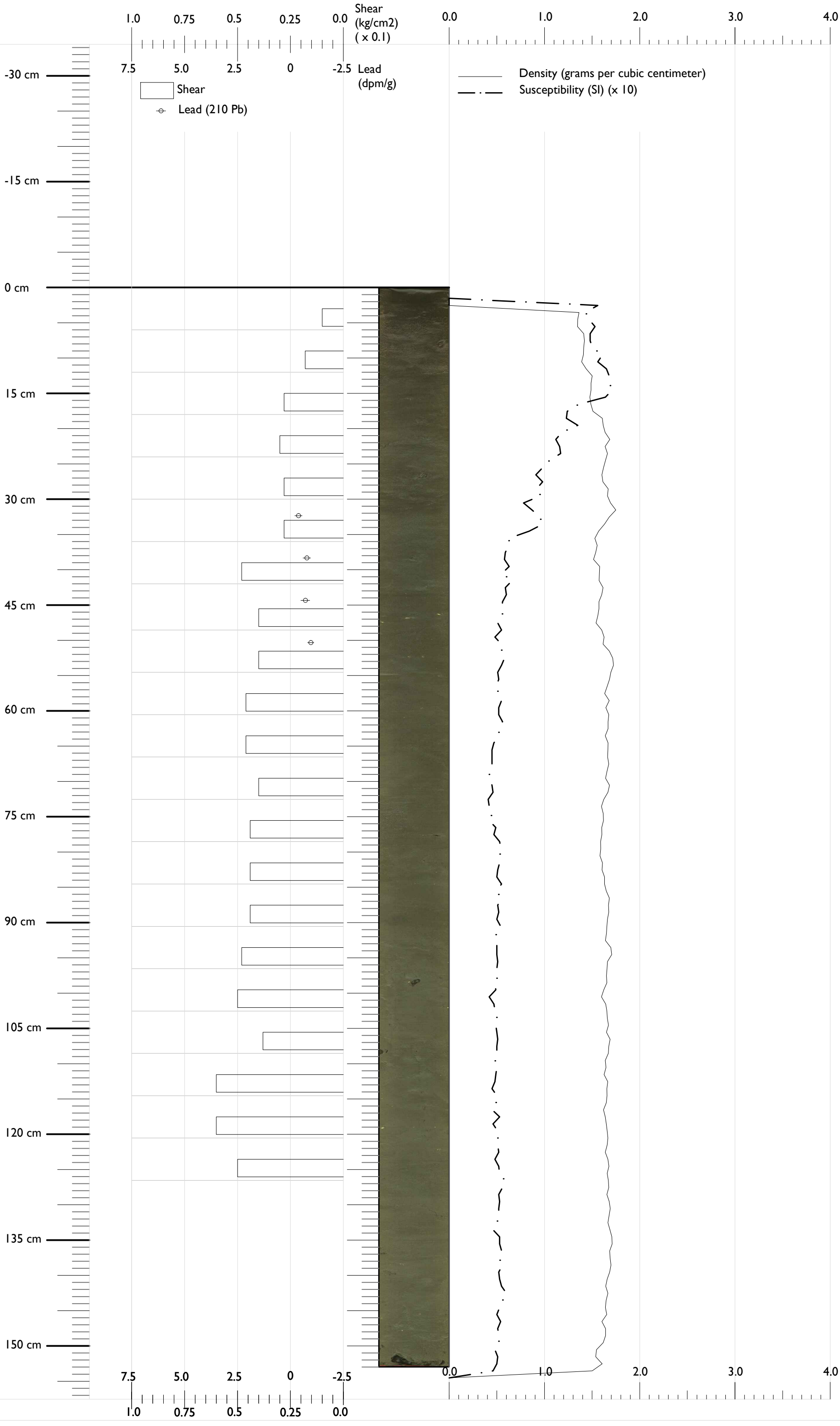
NOTES:

Unpenetrated Barrel/Cable Length (A):	Actual Penetration (C) = B-A
Penetrated Barrel/Cable Length (B):	Recovered Core Length (D):

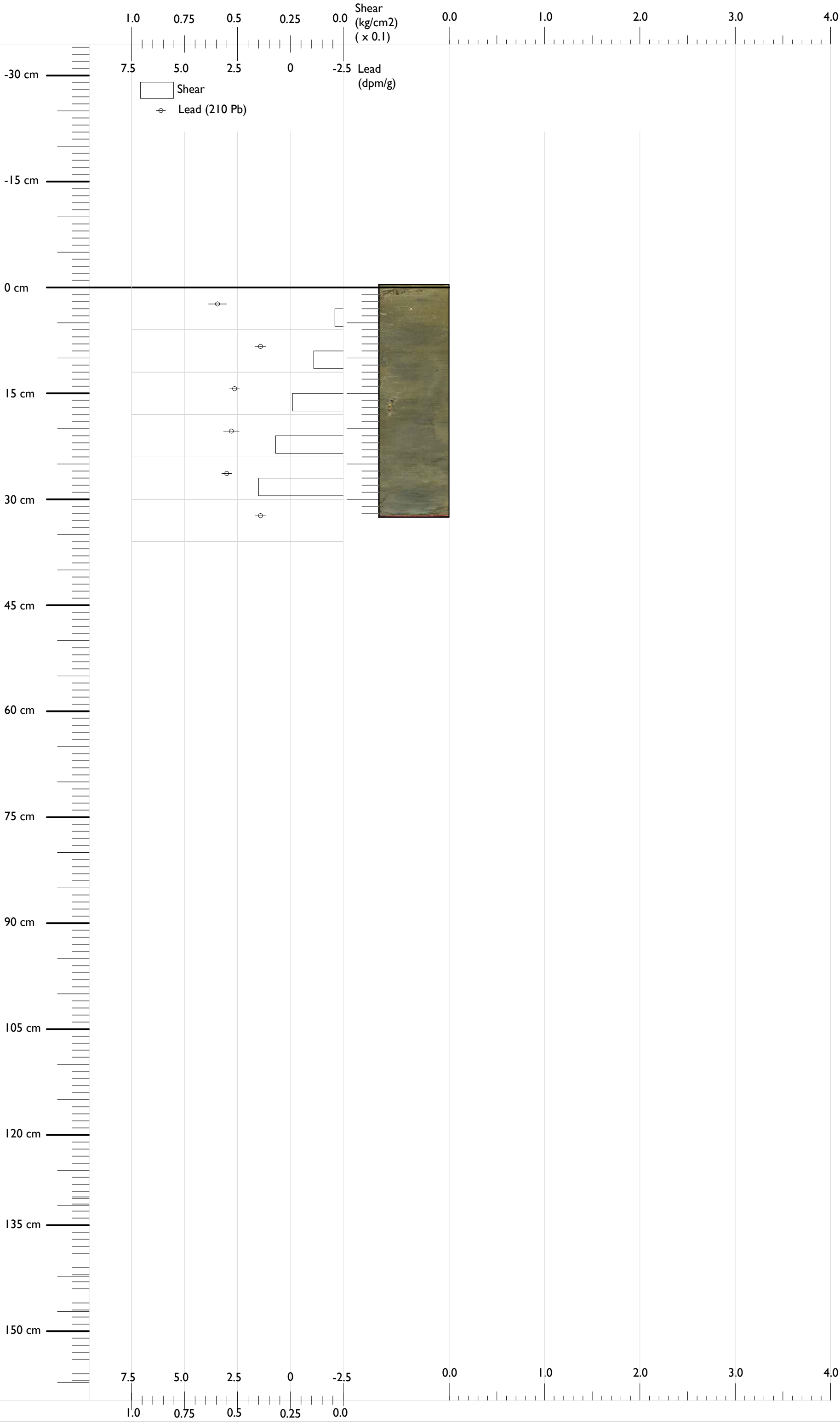
Appendix D

Comprehensive Sediment Core Plots

1-4


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

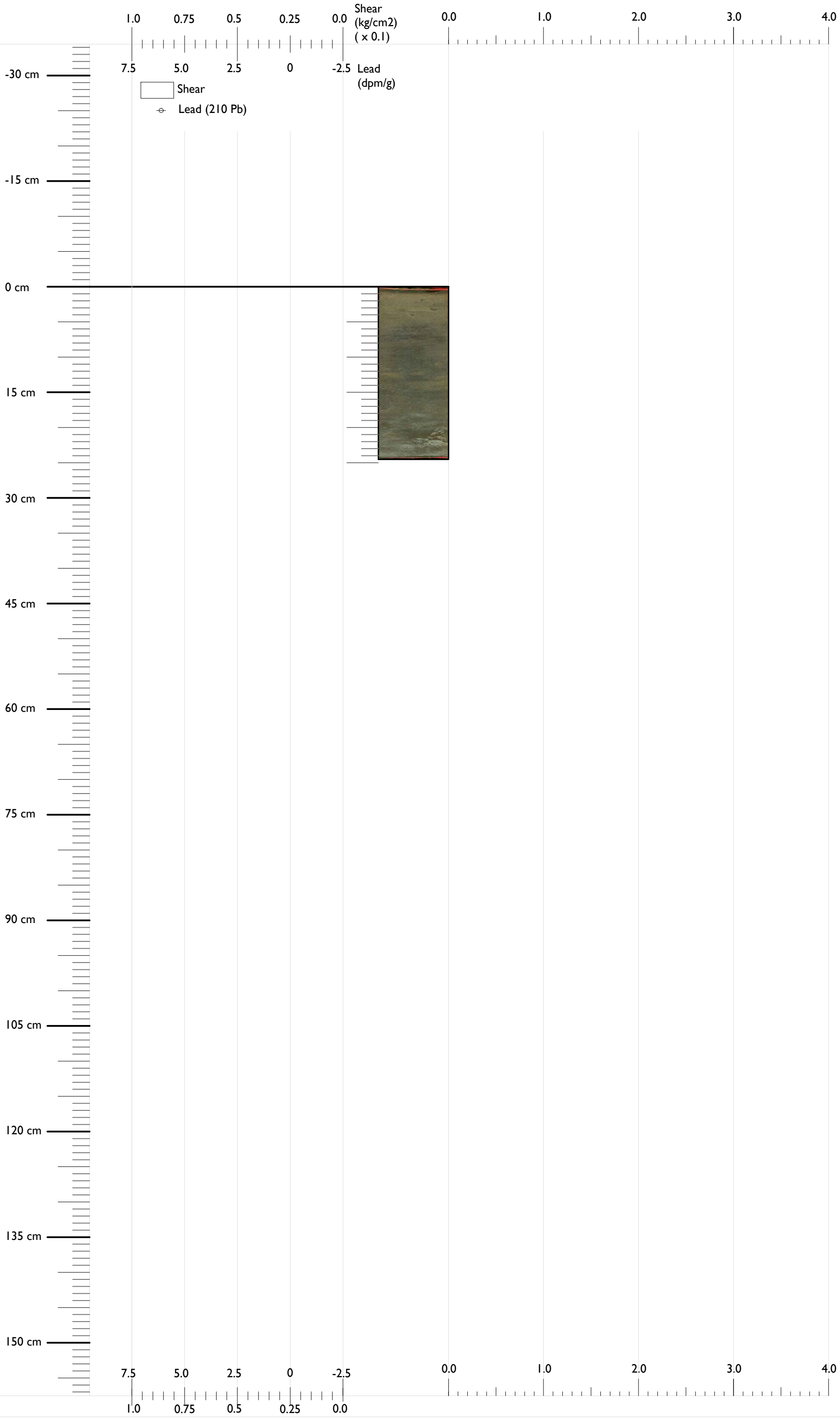
1-5


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

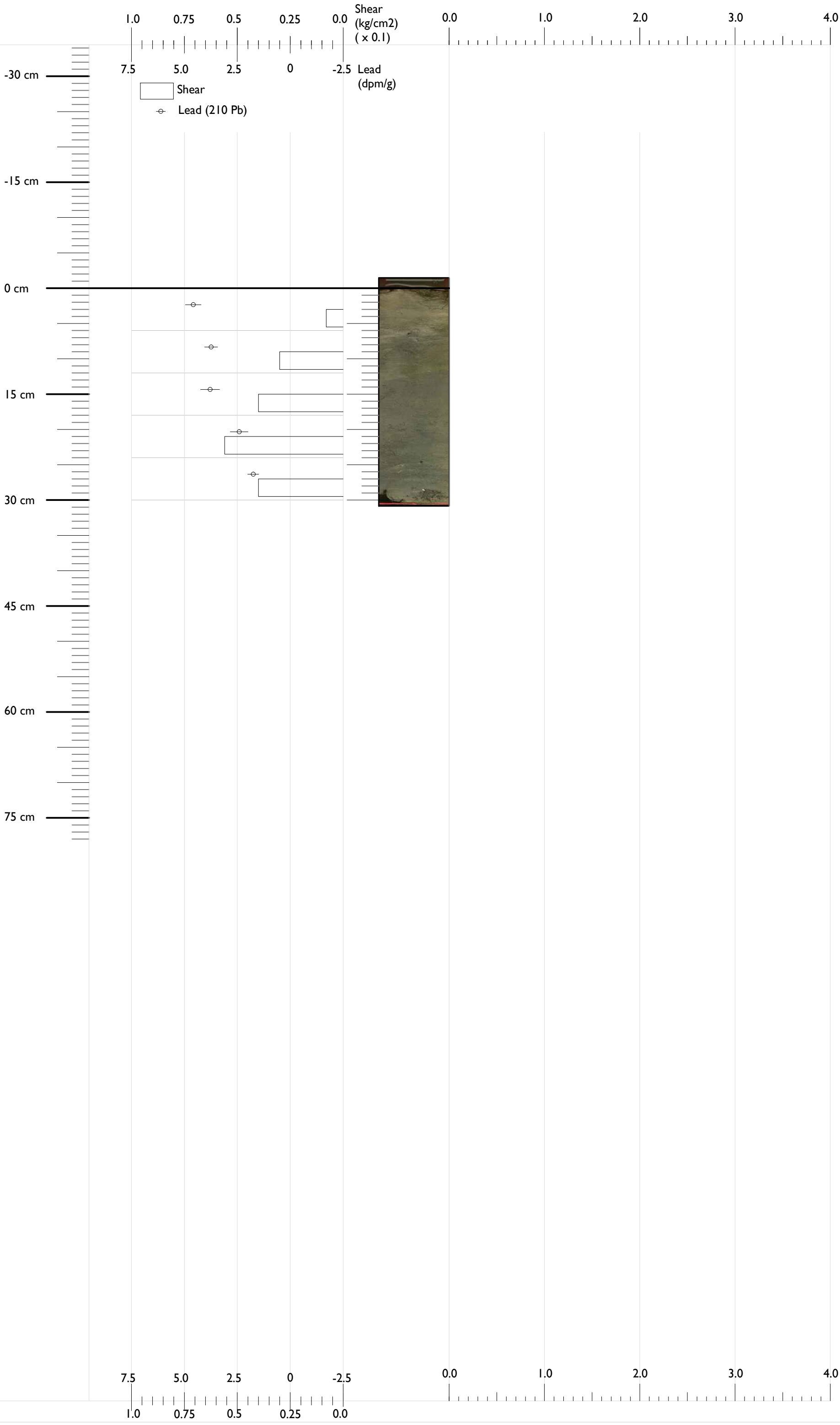
1-6


Shear
(kg/cm2)
(x 0.1)
1.0
0.75
0.5
0.25
0.0
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead
(dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

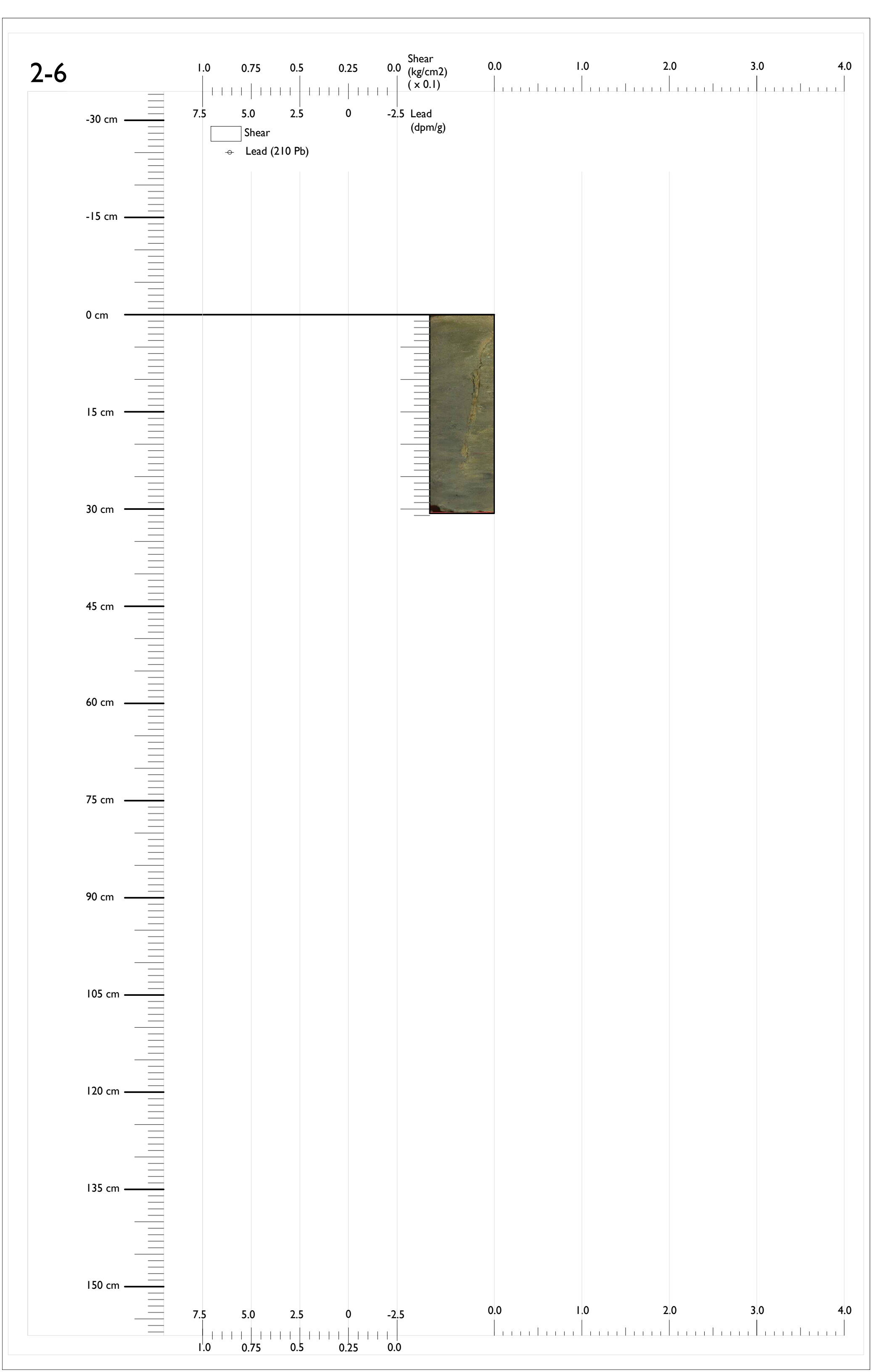
1-7


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

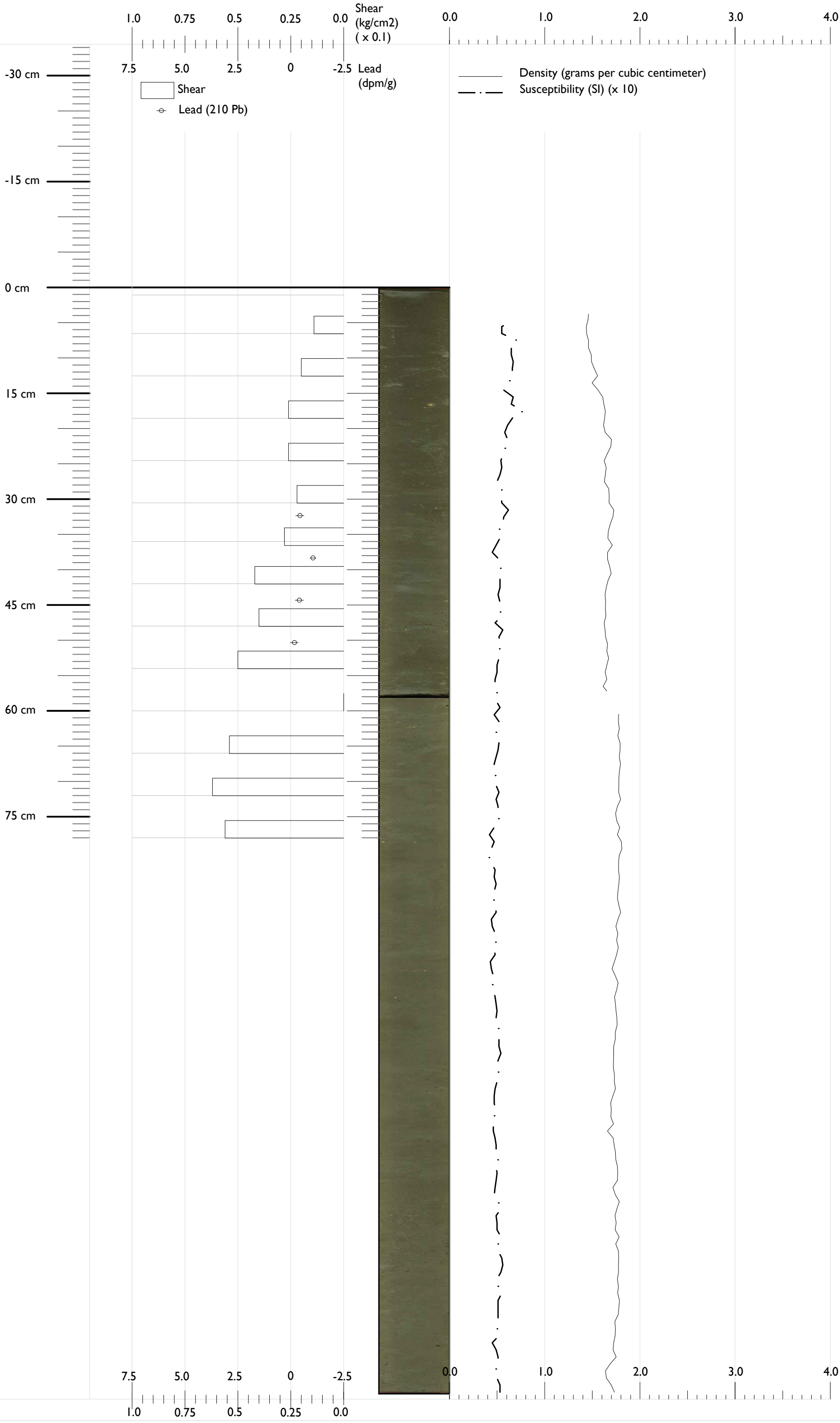
2-5


1.0
0.75
0.5
0.25
0.0
Shear
(kg/cm2)
(x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead
(dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm

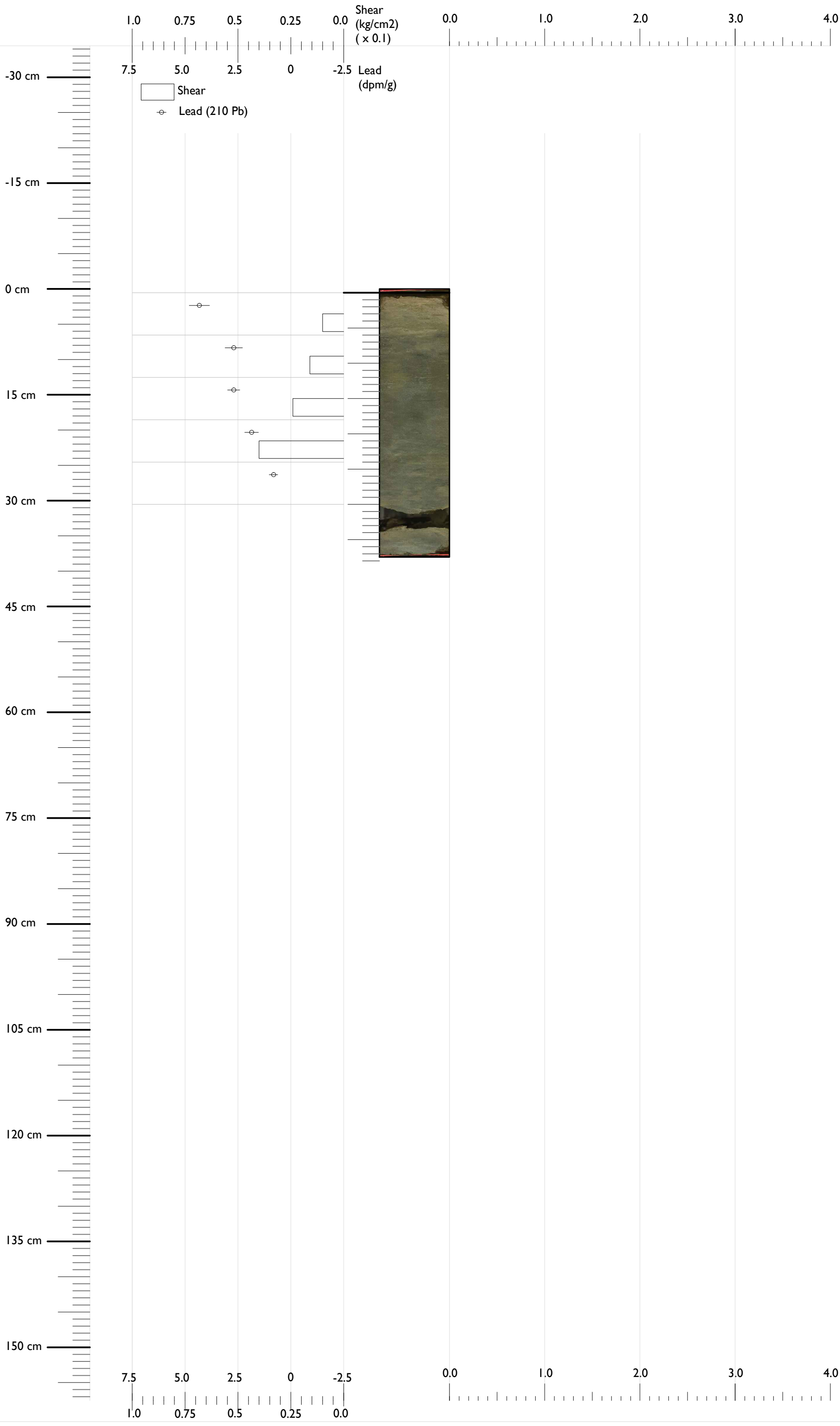
2-6


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

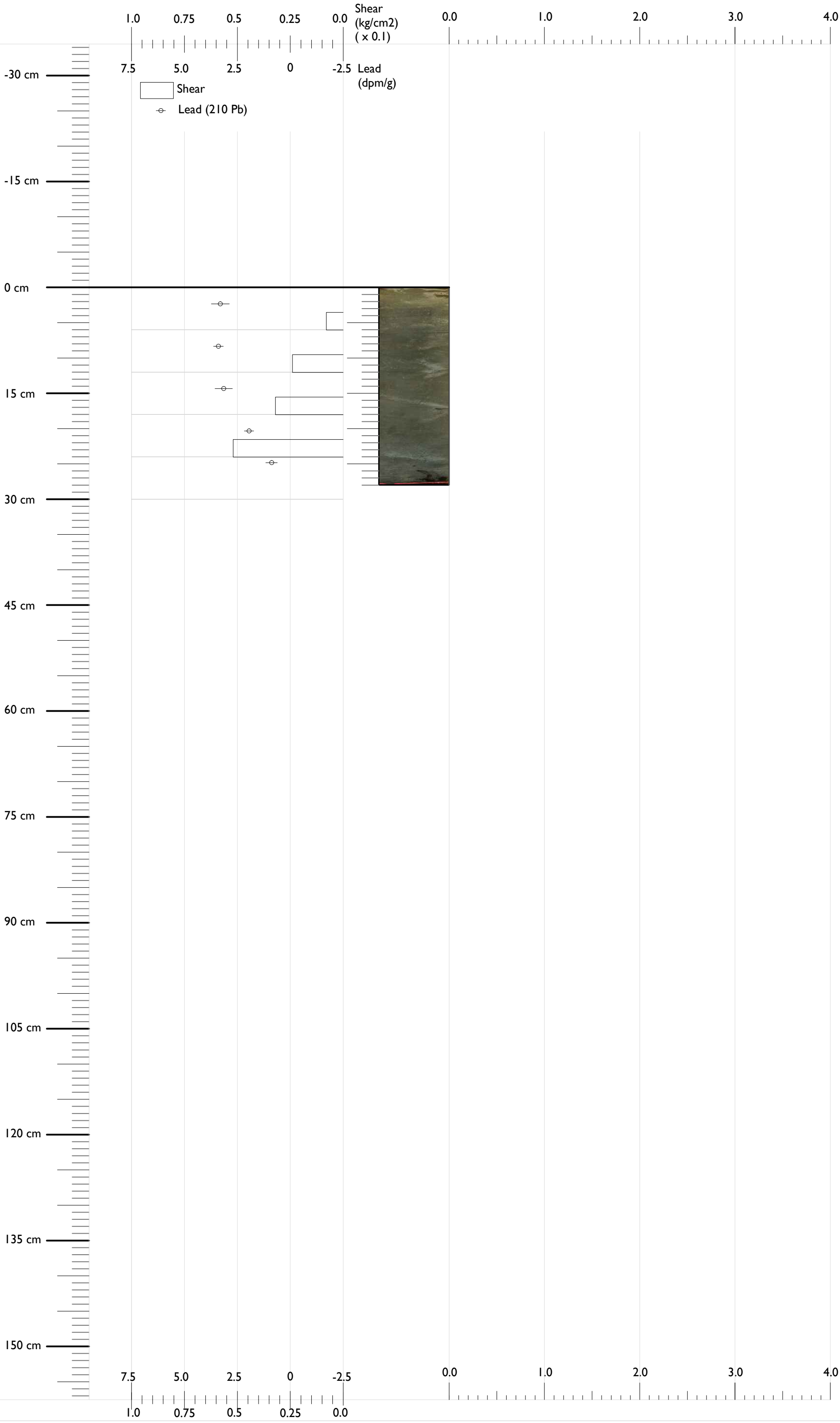
3-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm

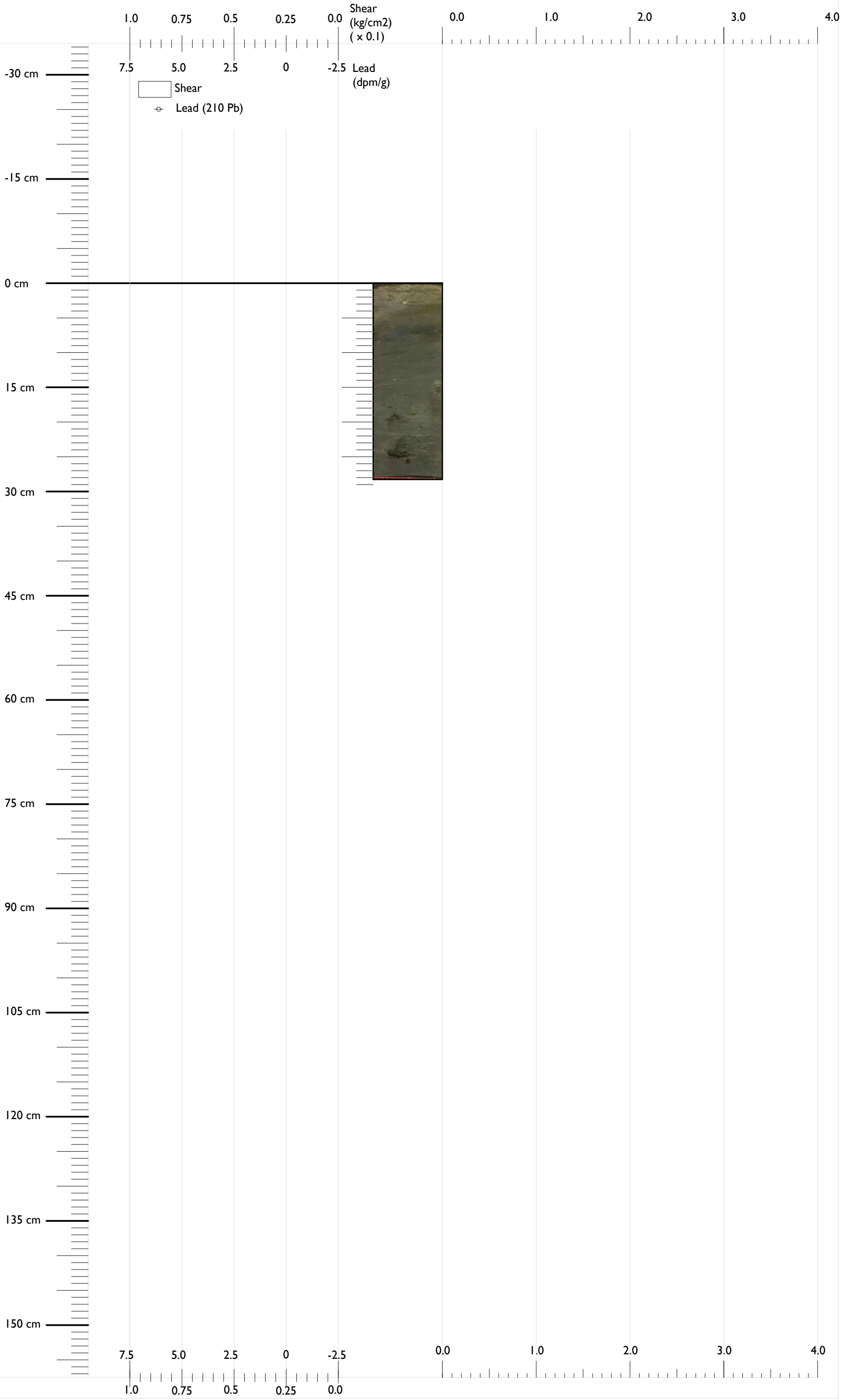
3-2


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

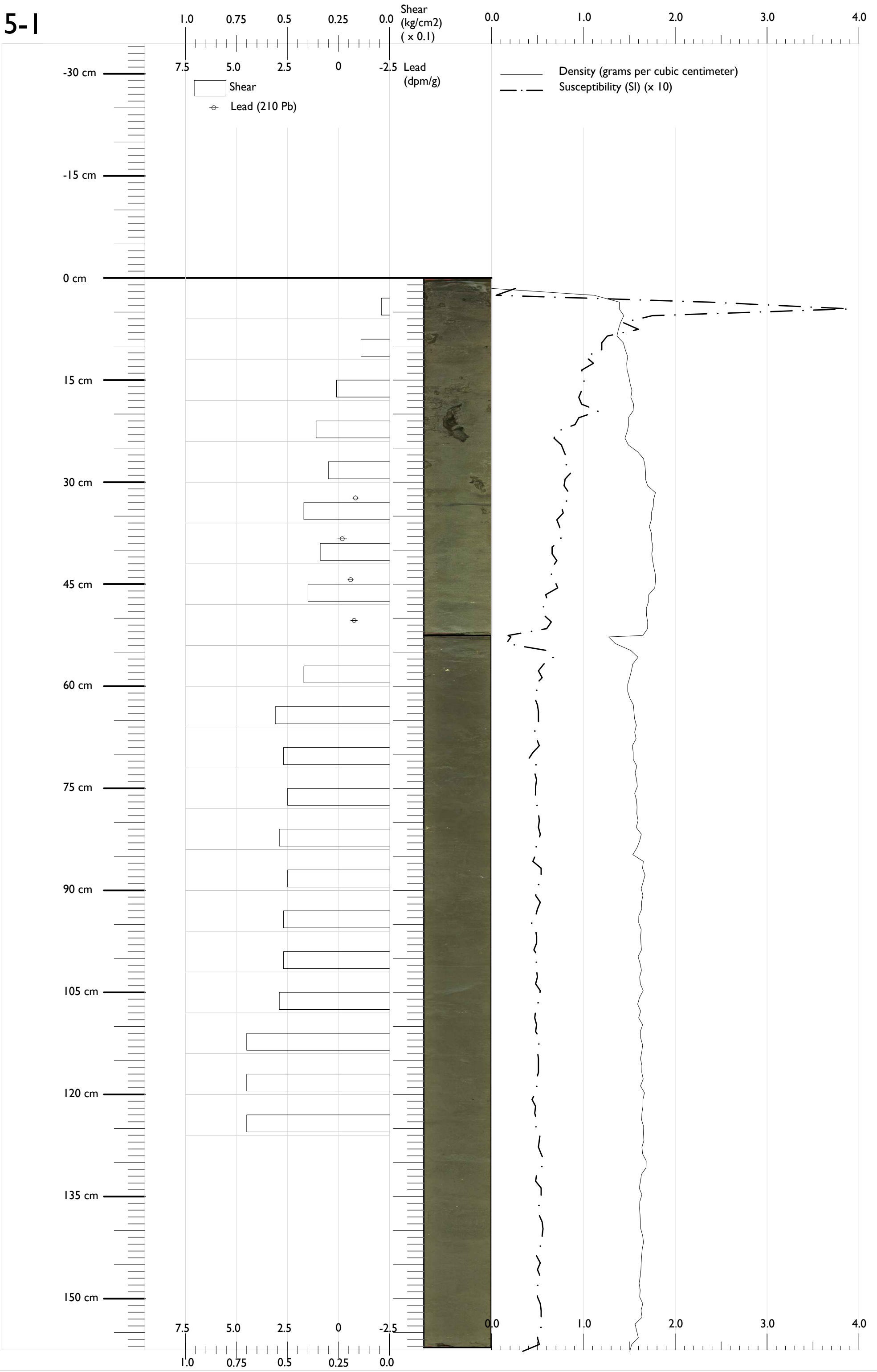
4-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

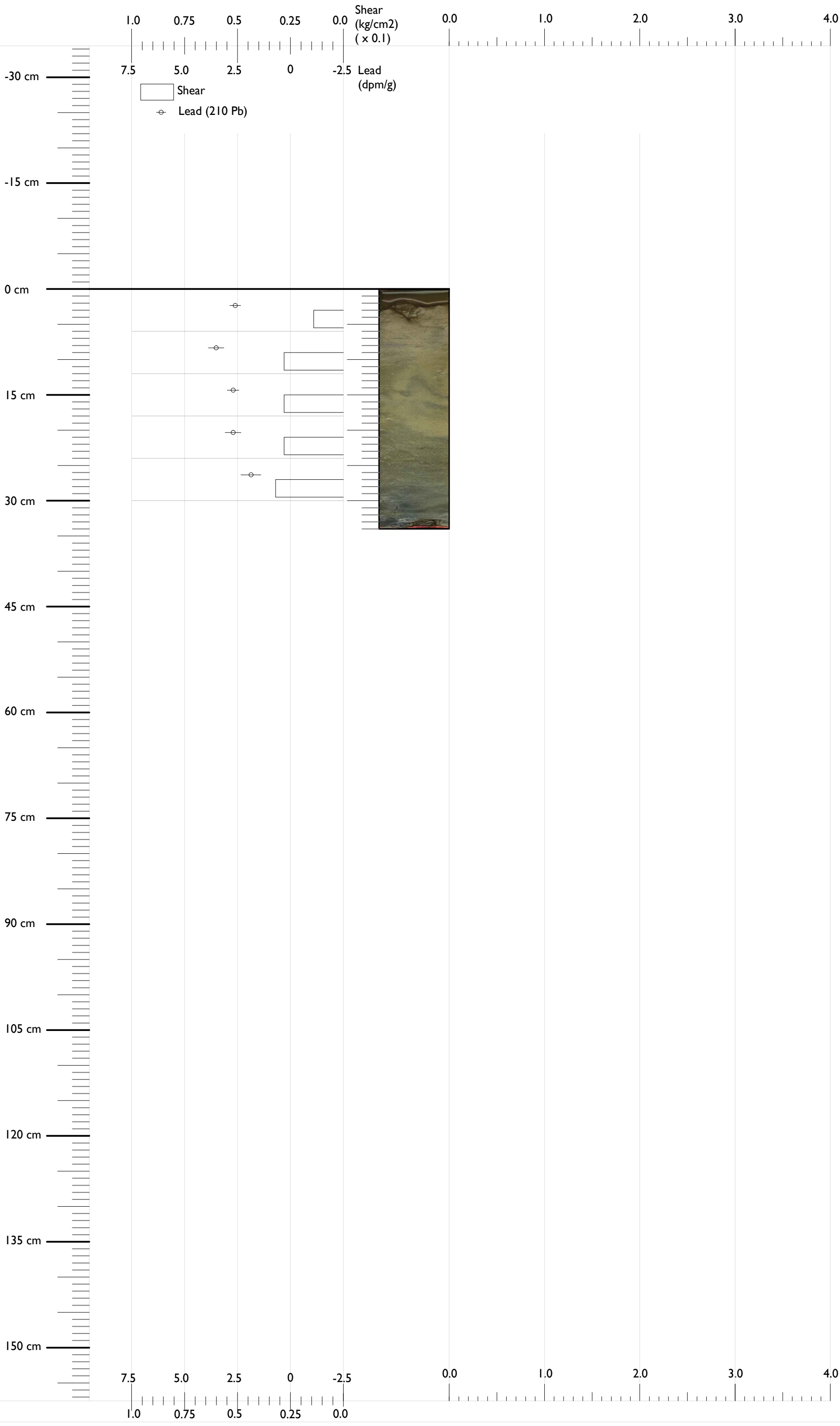
4-2


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

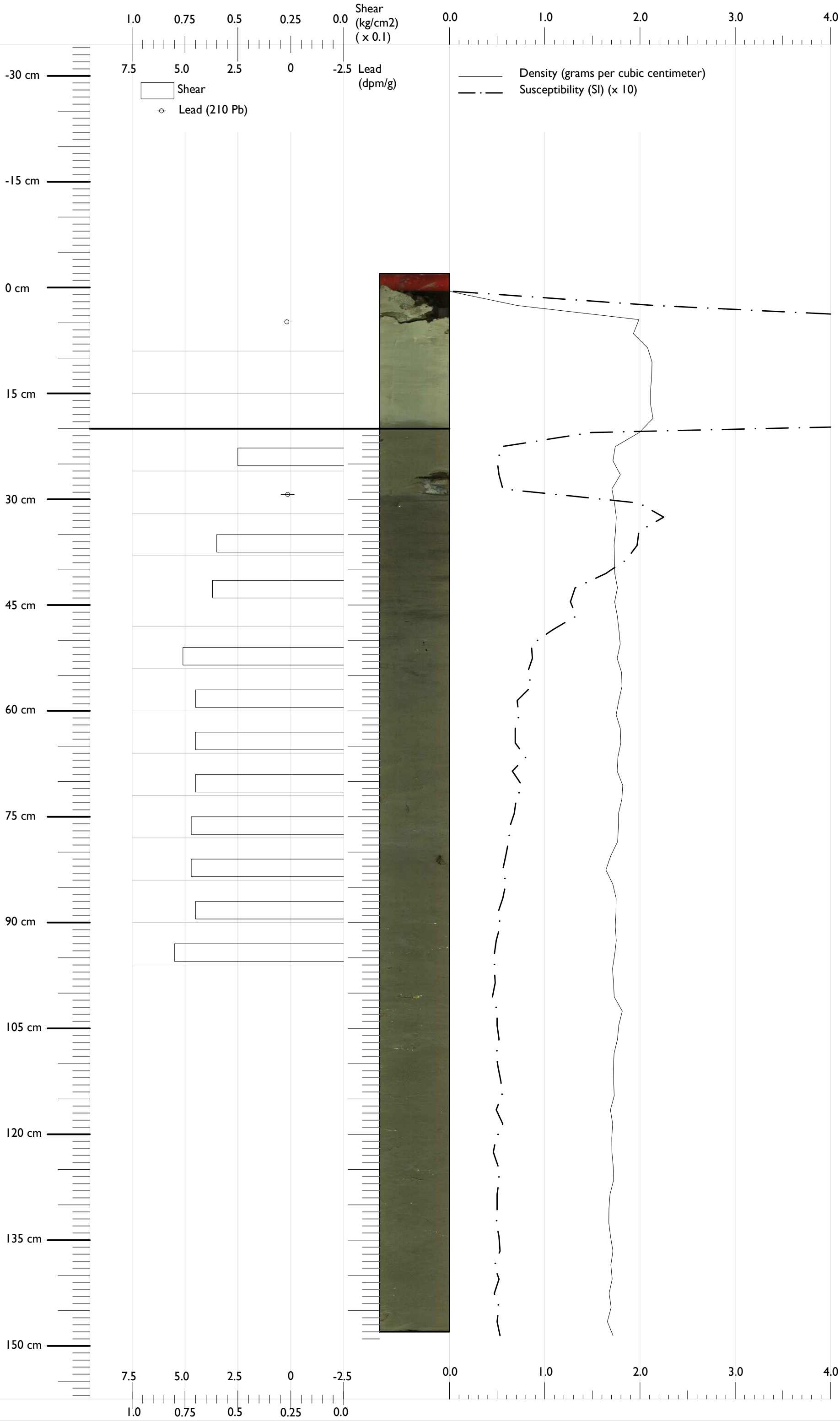
5-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

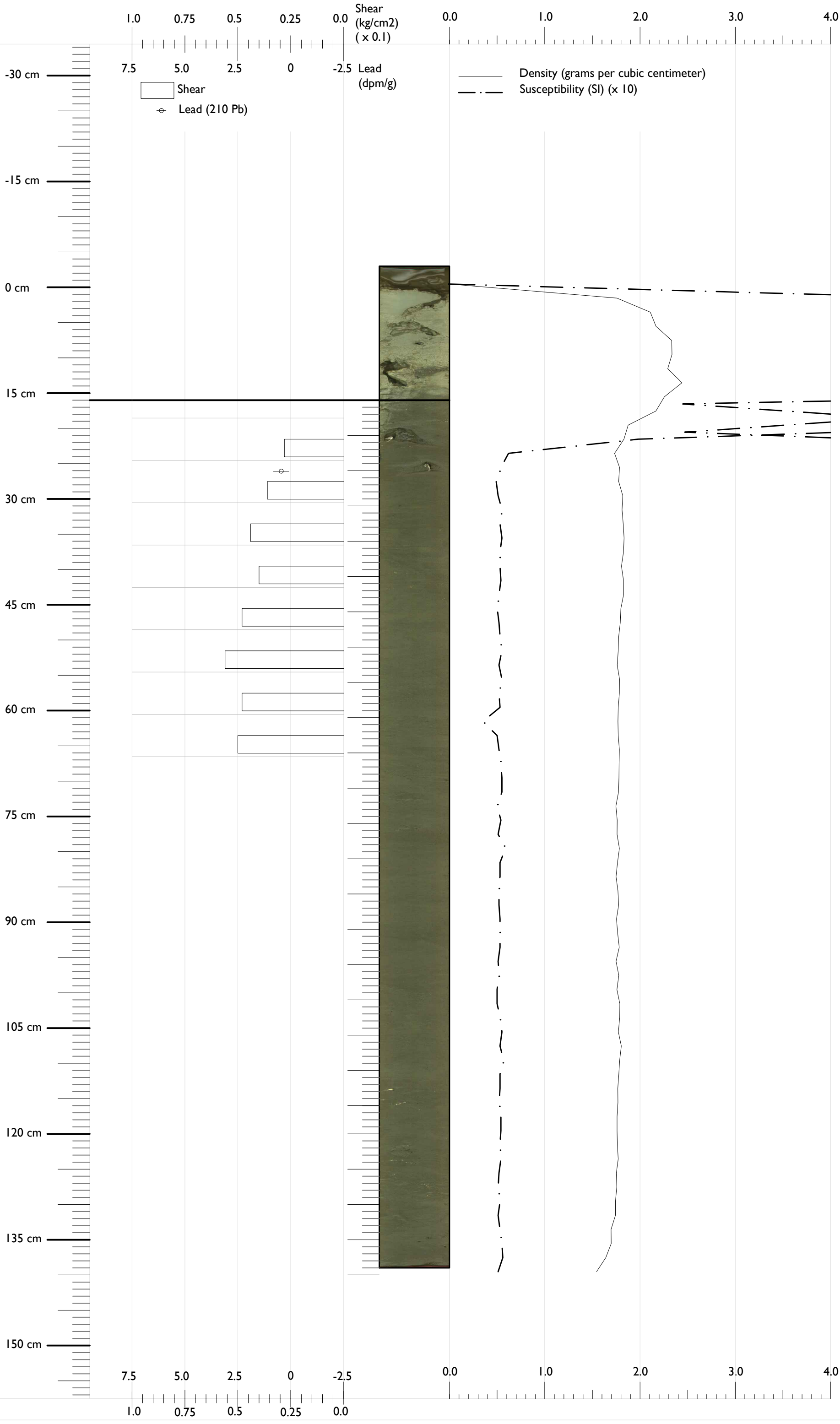
5-2


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

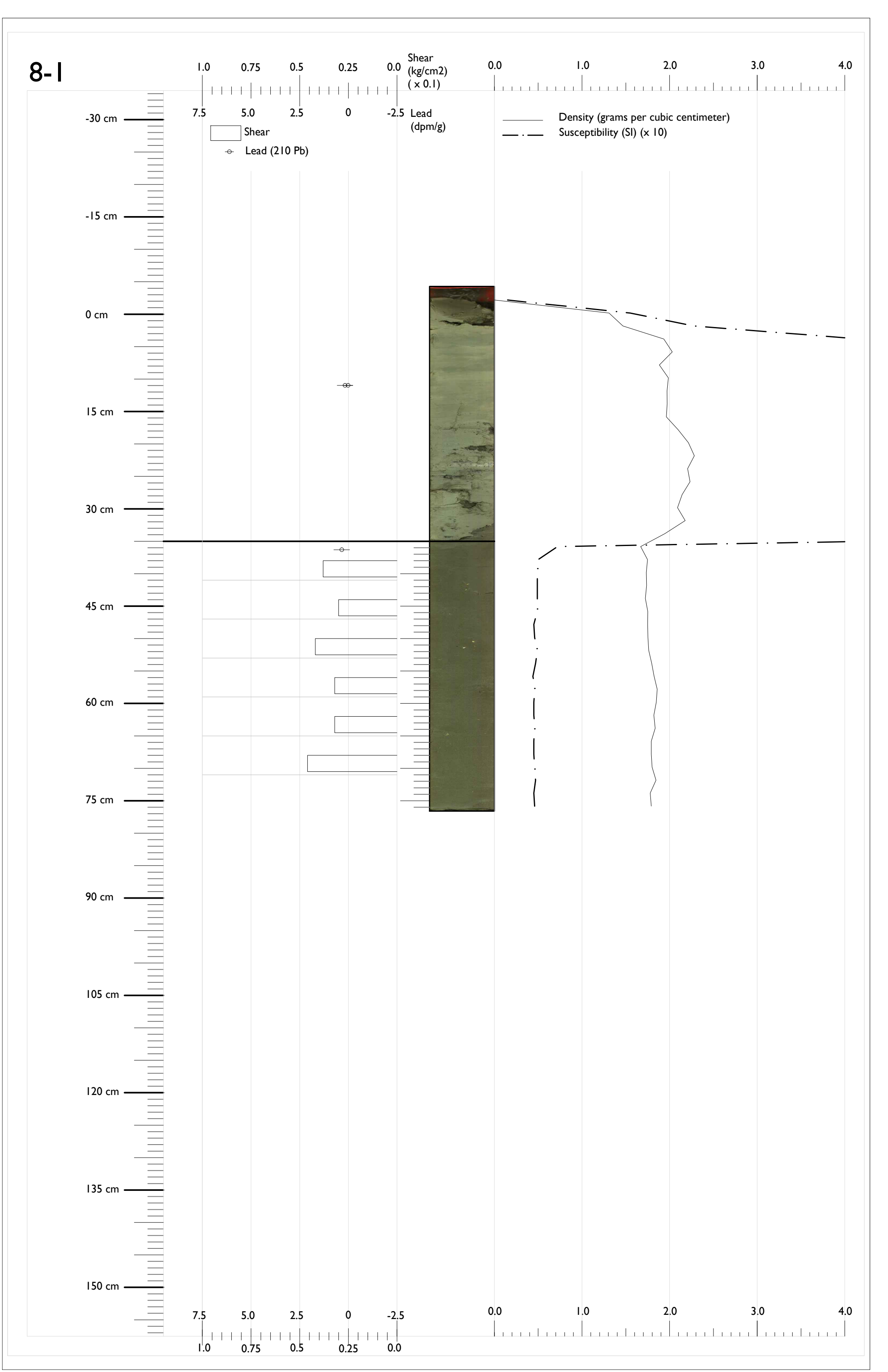
6-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

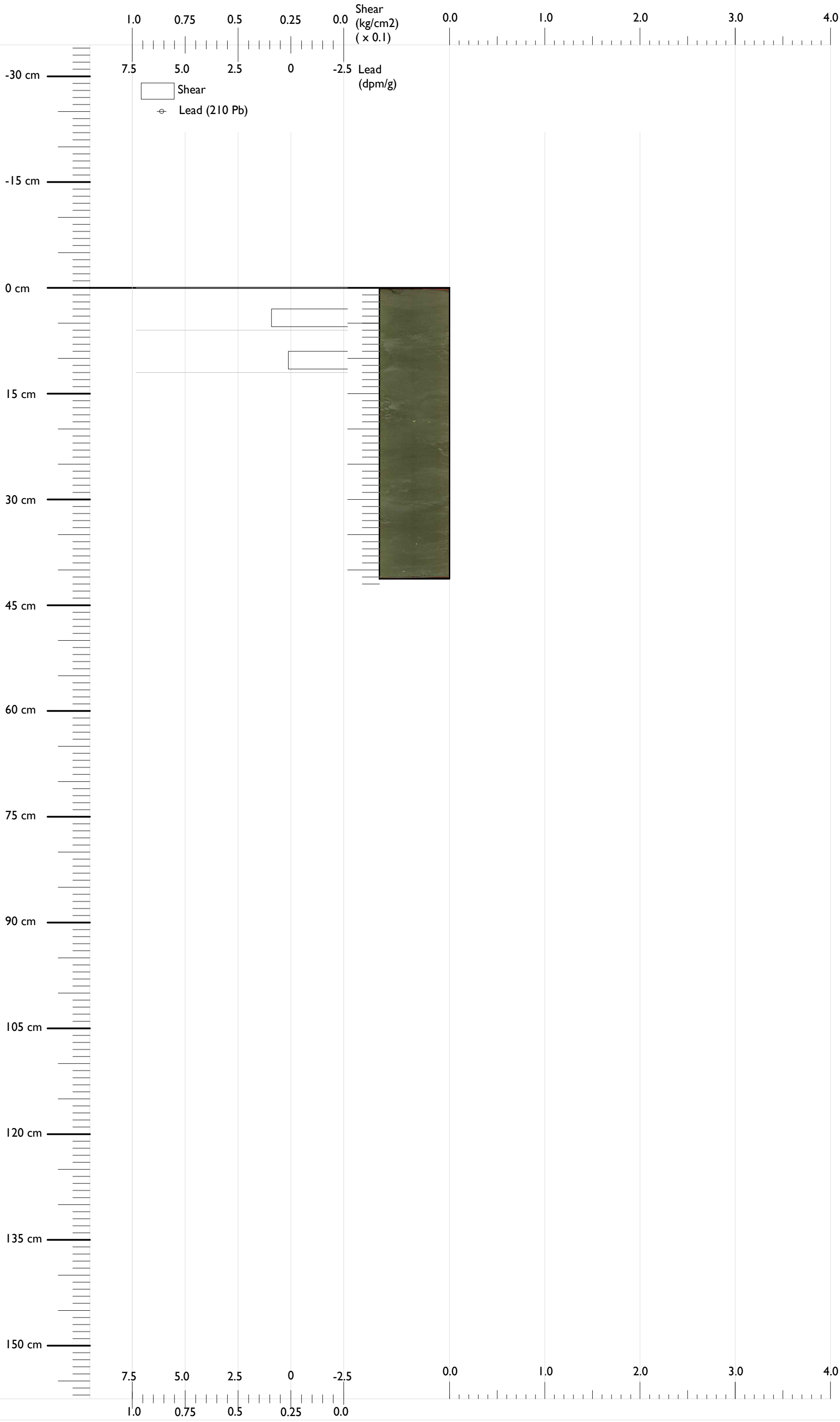
7-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

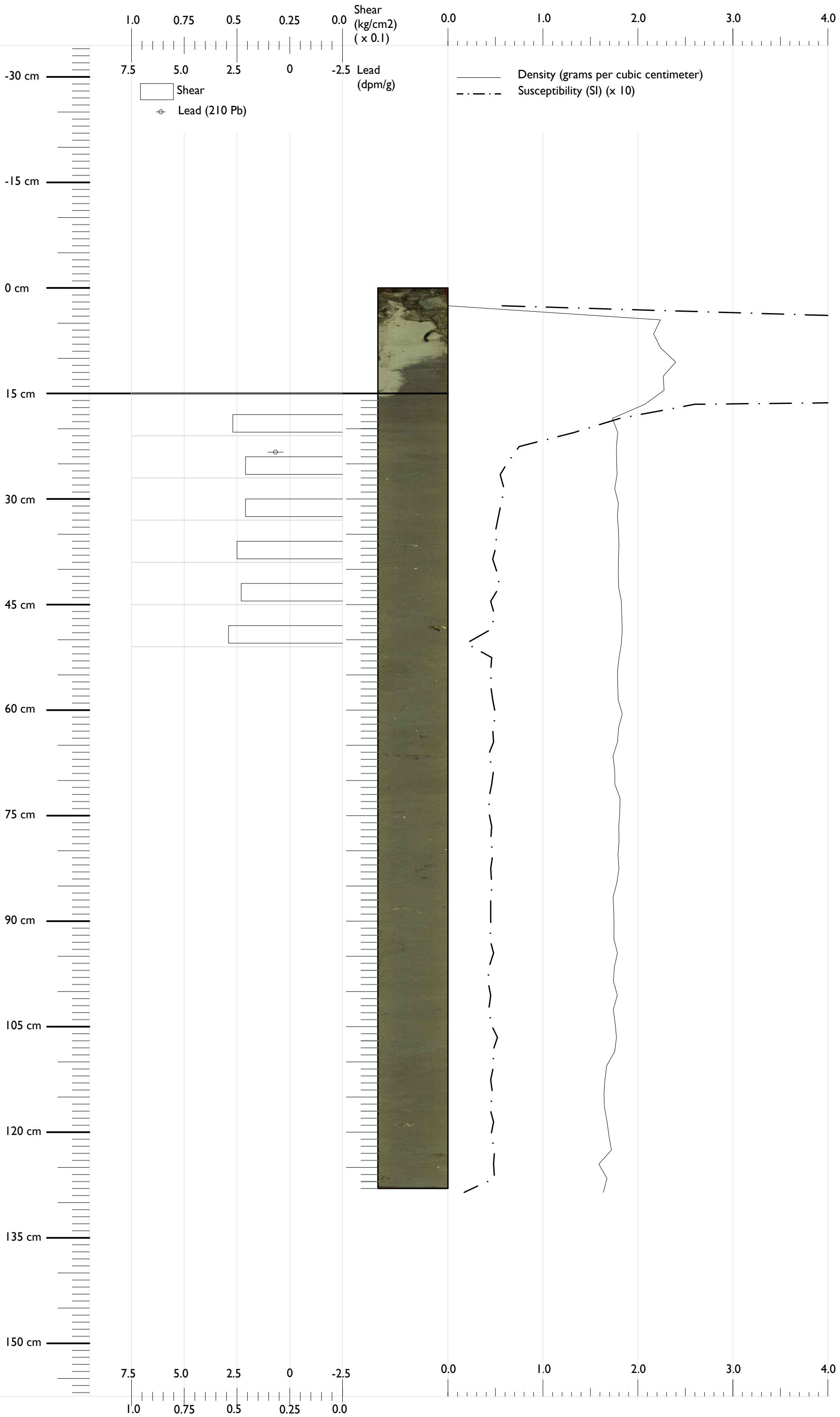
8-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

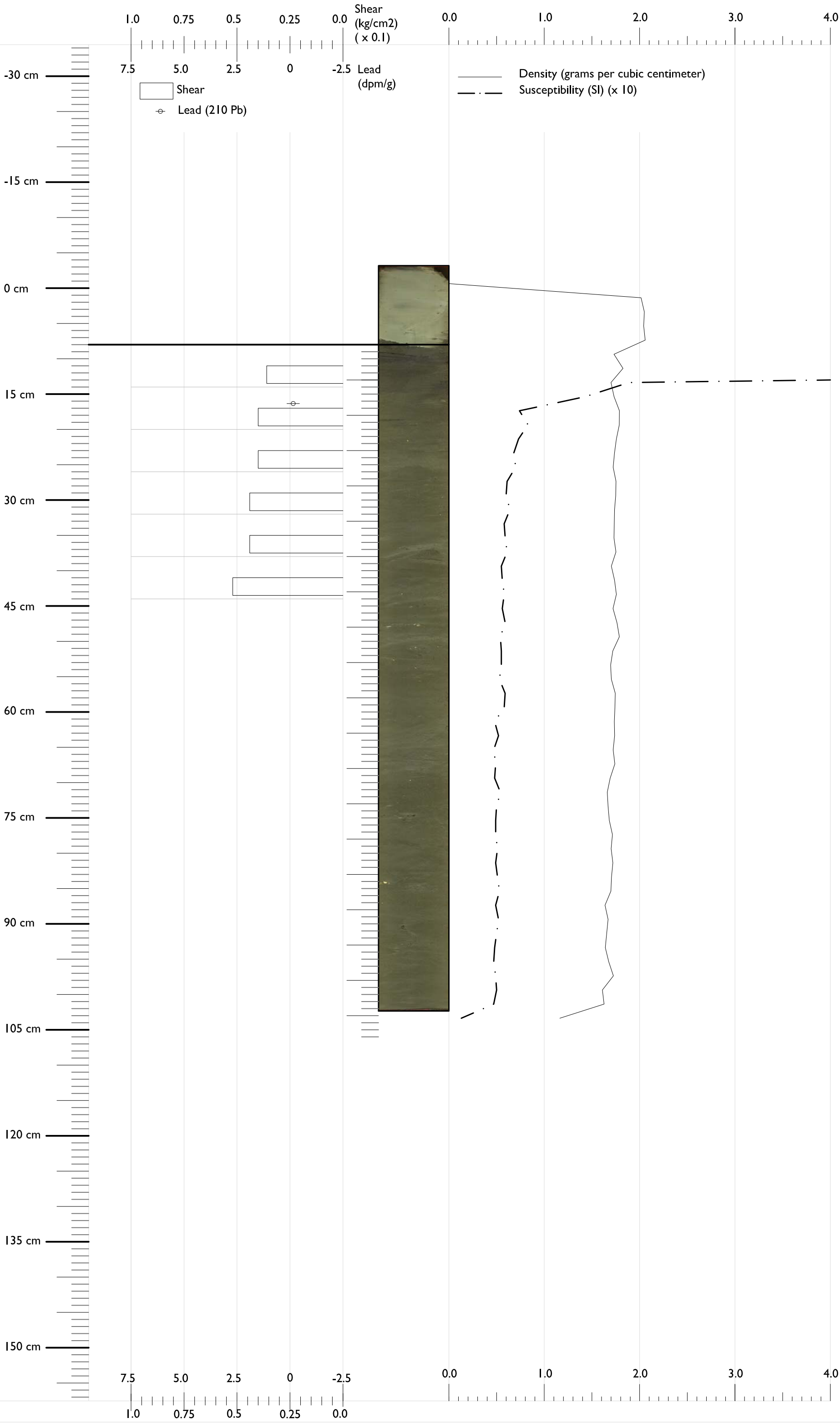
8-2


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

9-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

10-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

I I-I

Shear (kg/cm2) (x 0.1)

1.0 0.75 0.5 0.25 0.0

7.5 5.0 2.5 0 -2.5 Lead (dpm/g)

Shear

Lead (210 Pb)

0.0 1.0 2.0 3.0 4.0

Density (grams per cubic centimeter)

Susceptibility (SI) (x 10)

-30 cm

-15 cm

0 cm

15 cm

30 cm

45 cm

60 cm

75 cm

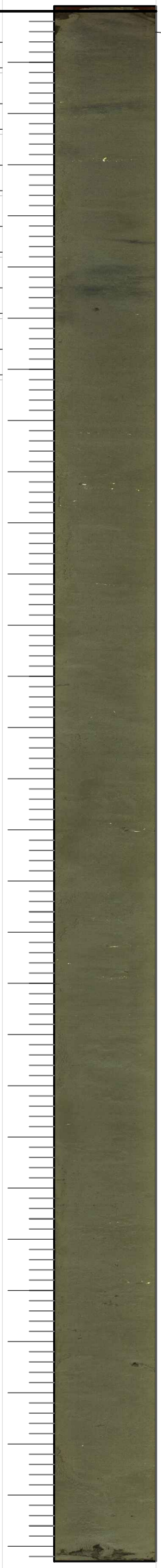
90 cm

105 cm

120 cm

135 cm

150 cm

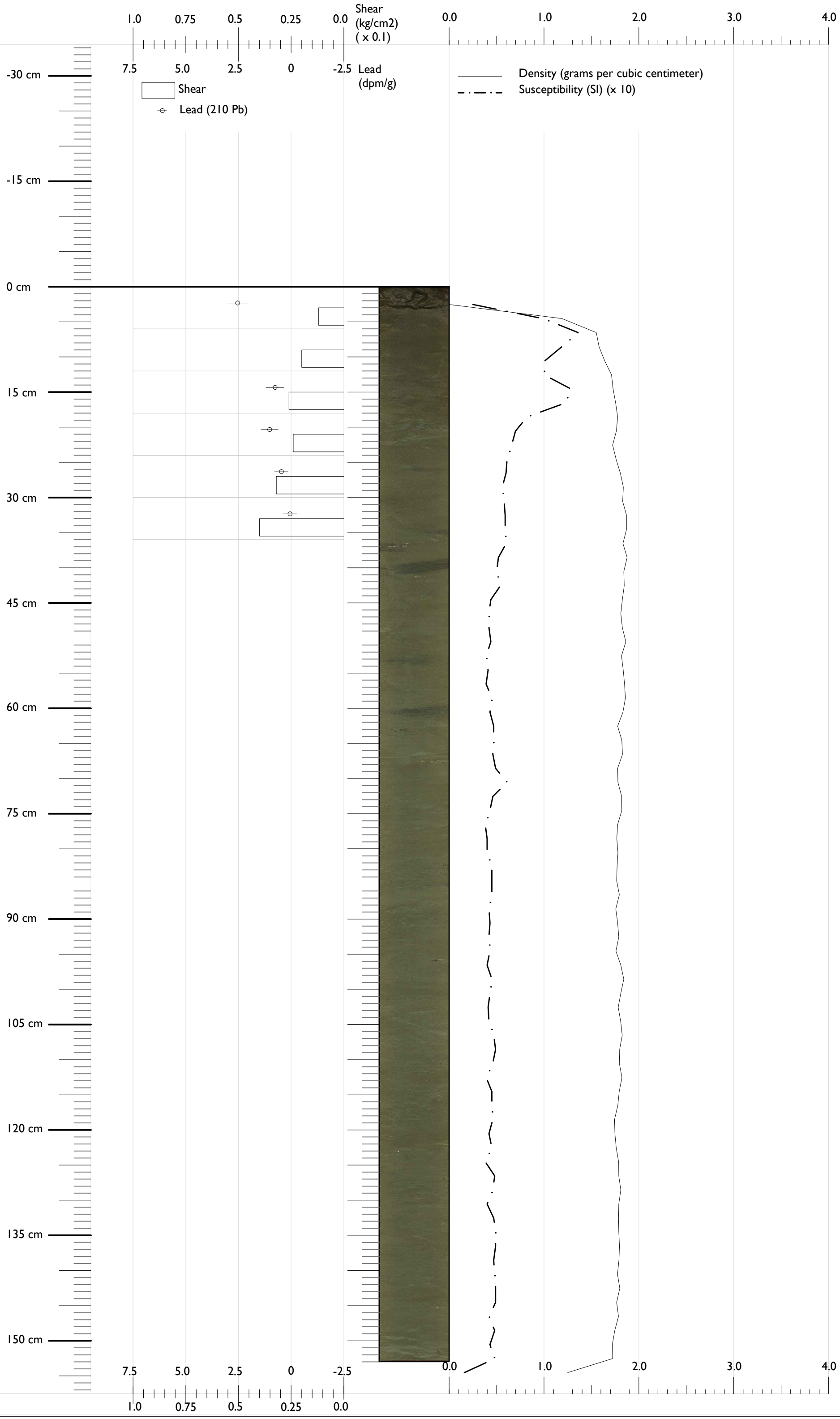


7.5 5.0 2.5 0 -2.5

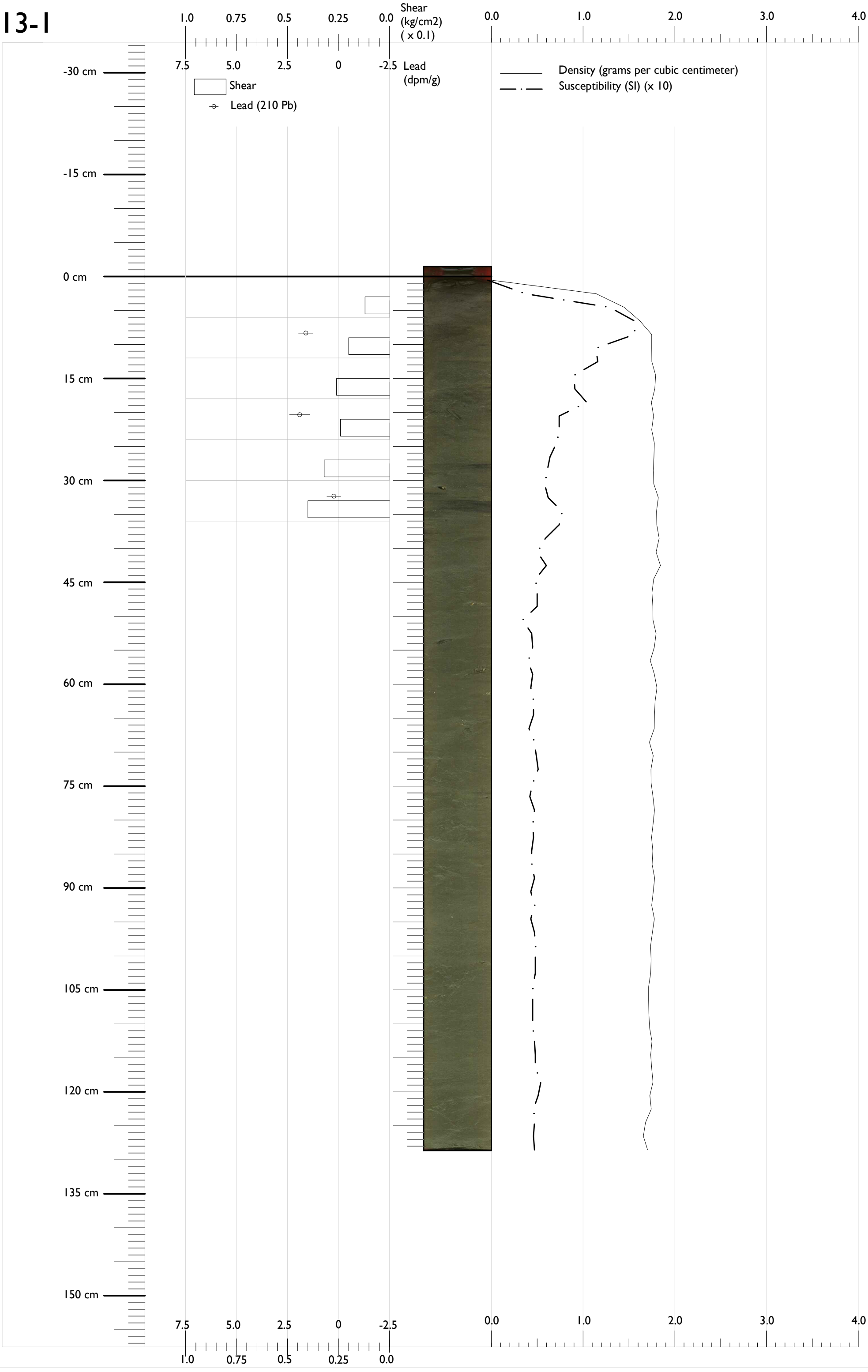
1.0 0.75 0.5 0.25 0.0

0.0 1.0 2.0 3.0 4.0

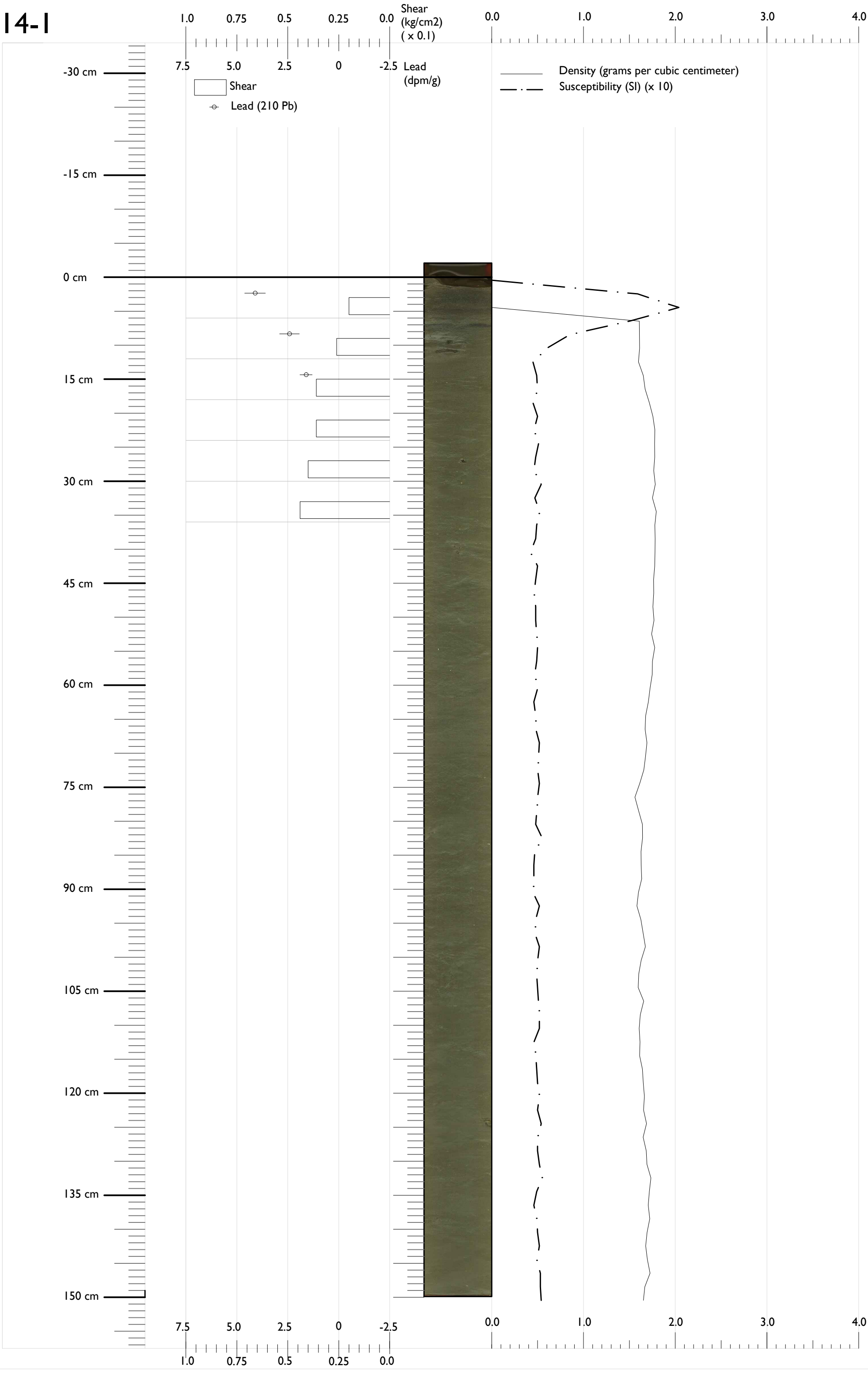
12-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

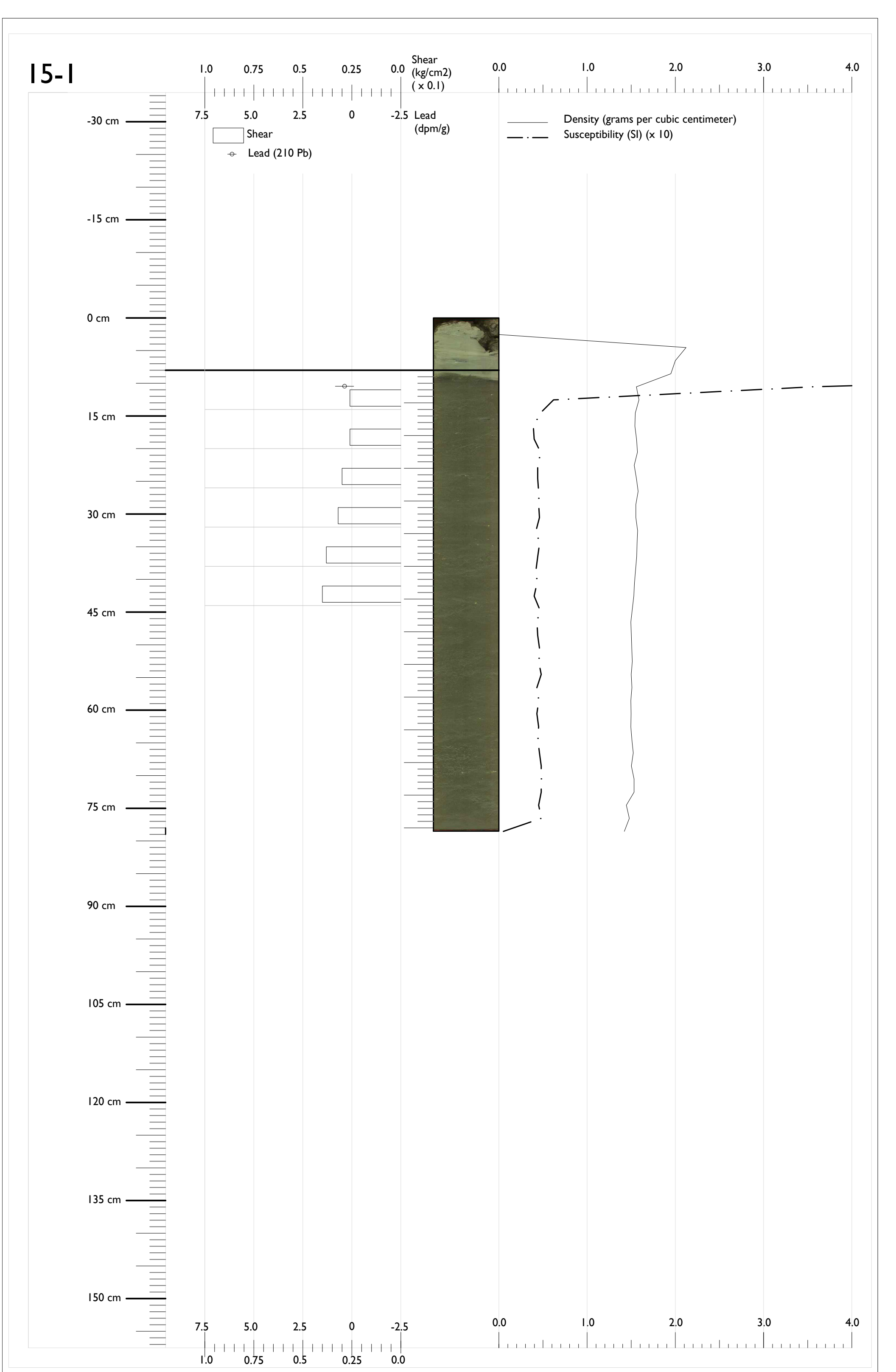
13-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

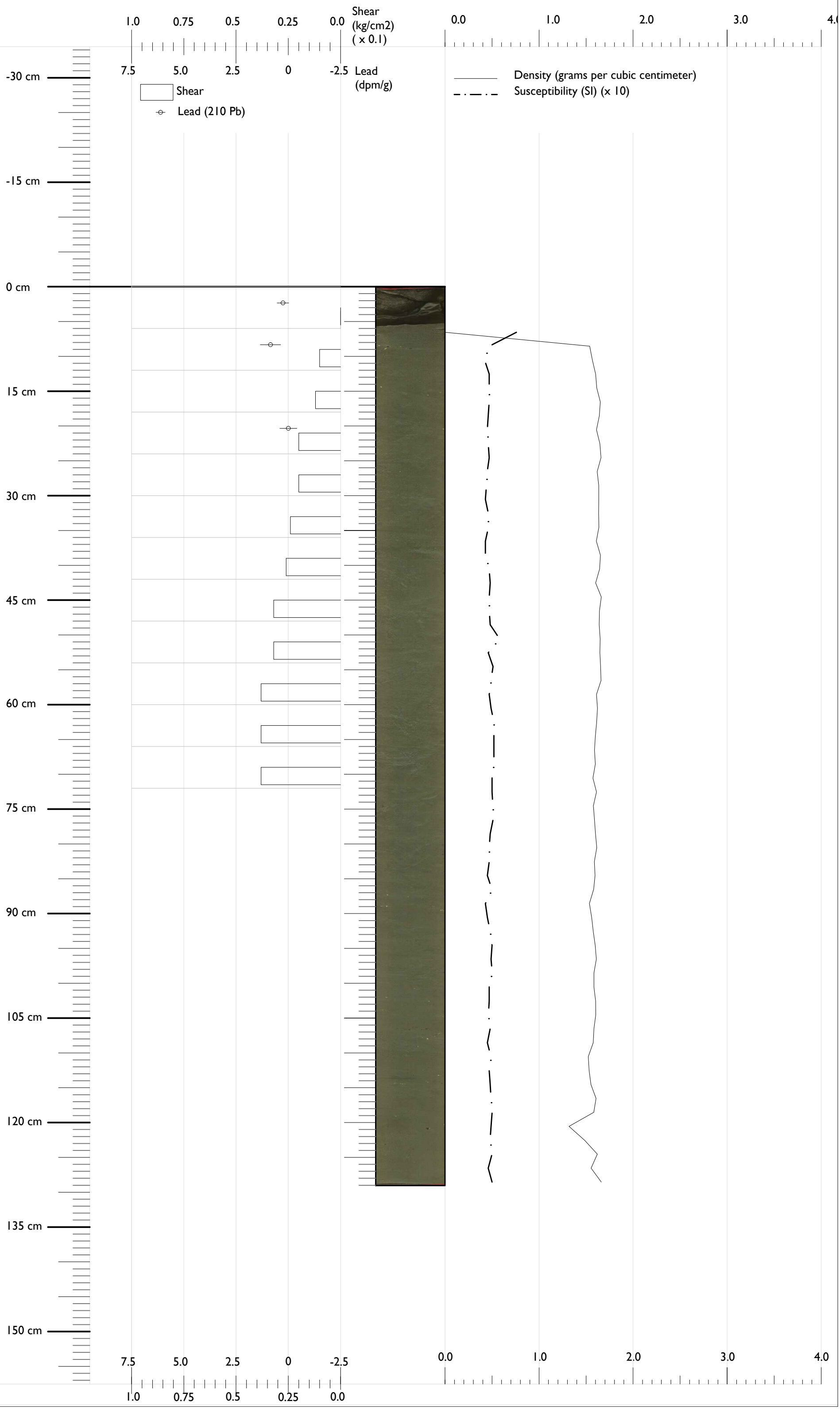
14-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

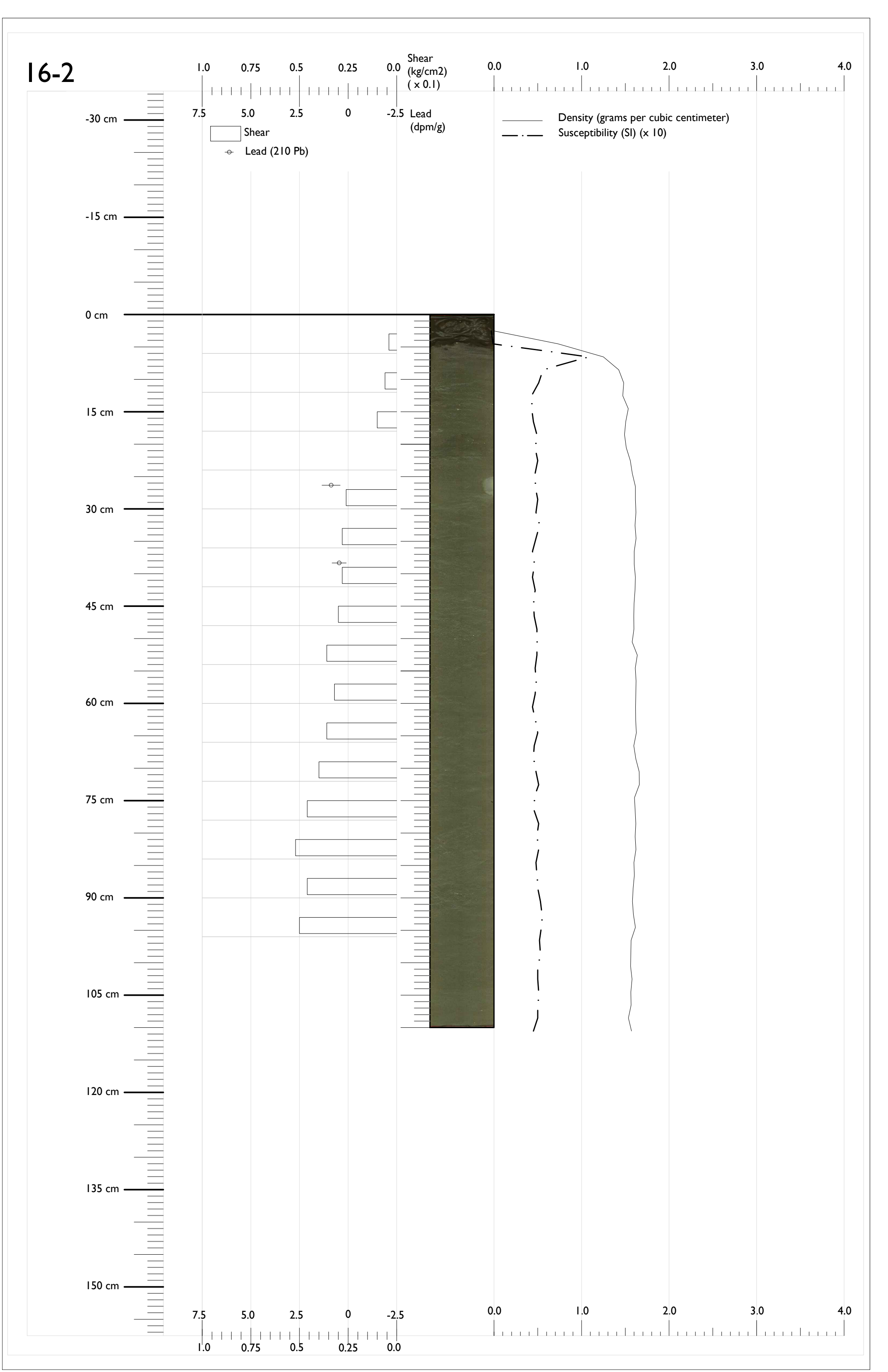
15-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
0.0
1.0
2.0
3.0
4.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
Shear
Lead (210 Pb)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

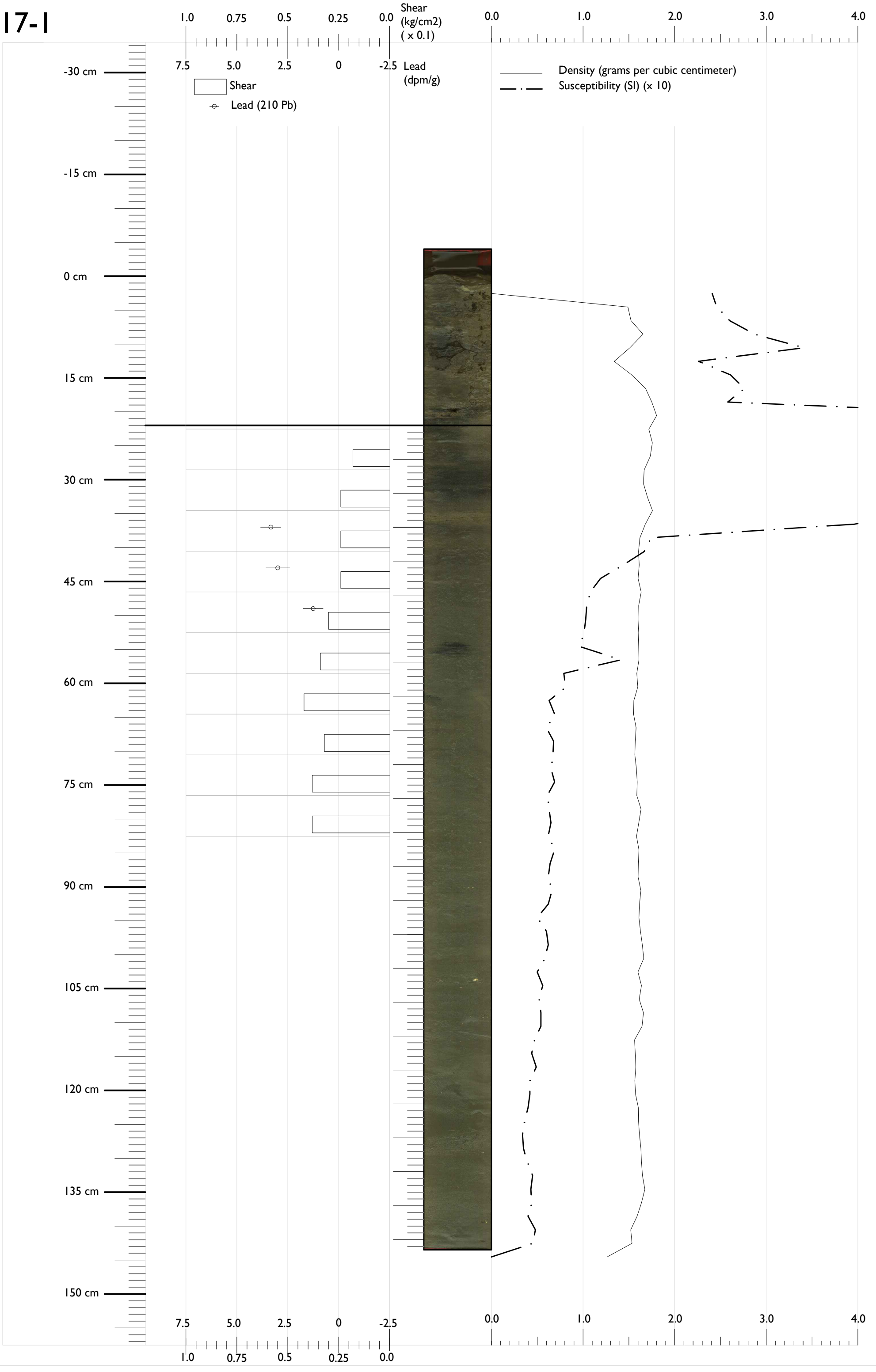
16-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

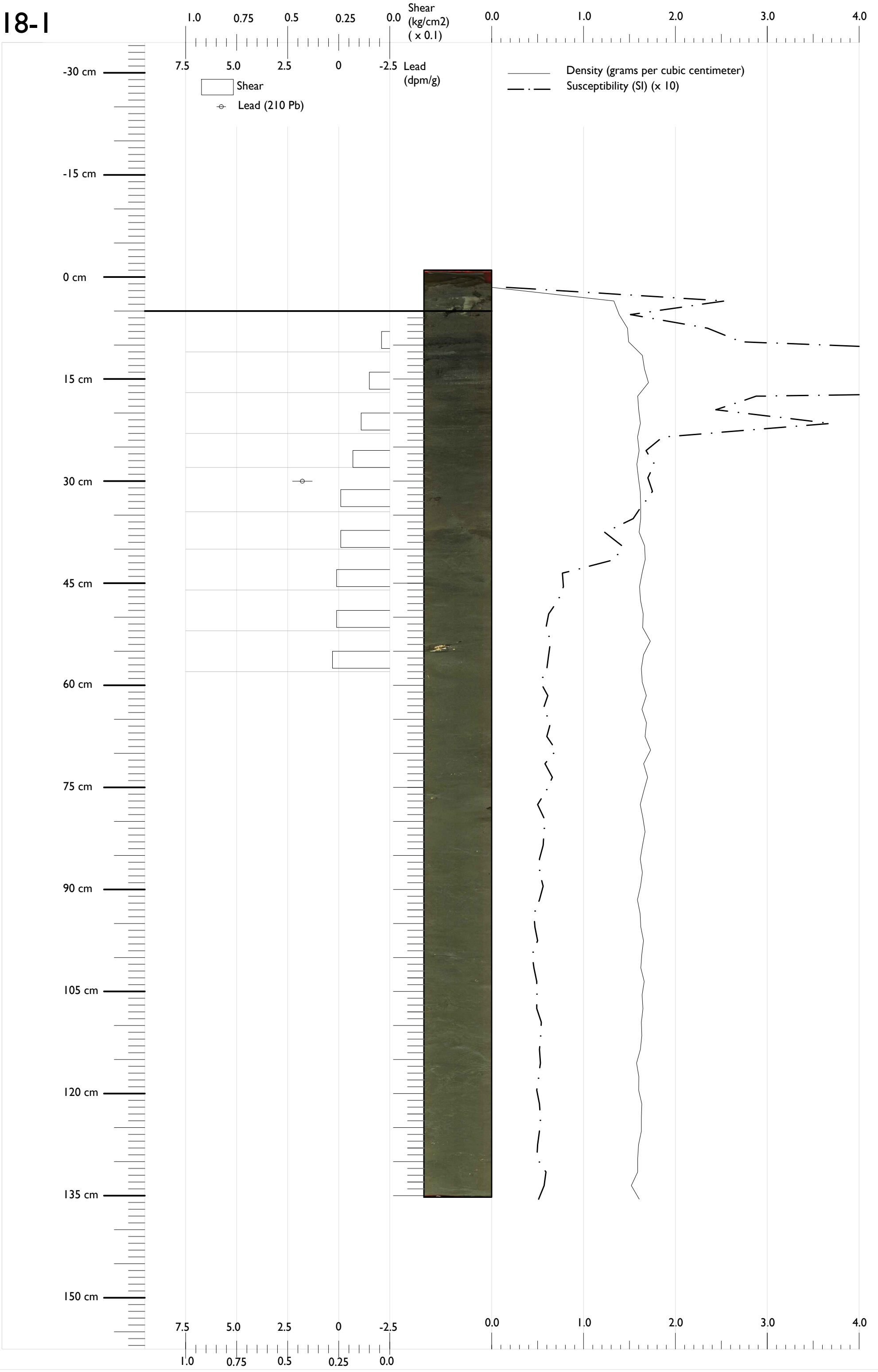
16-2


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

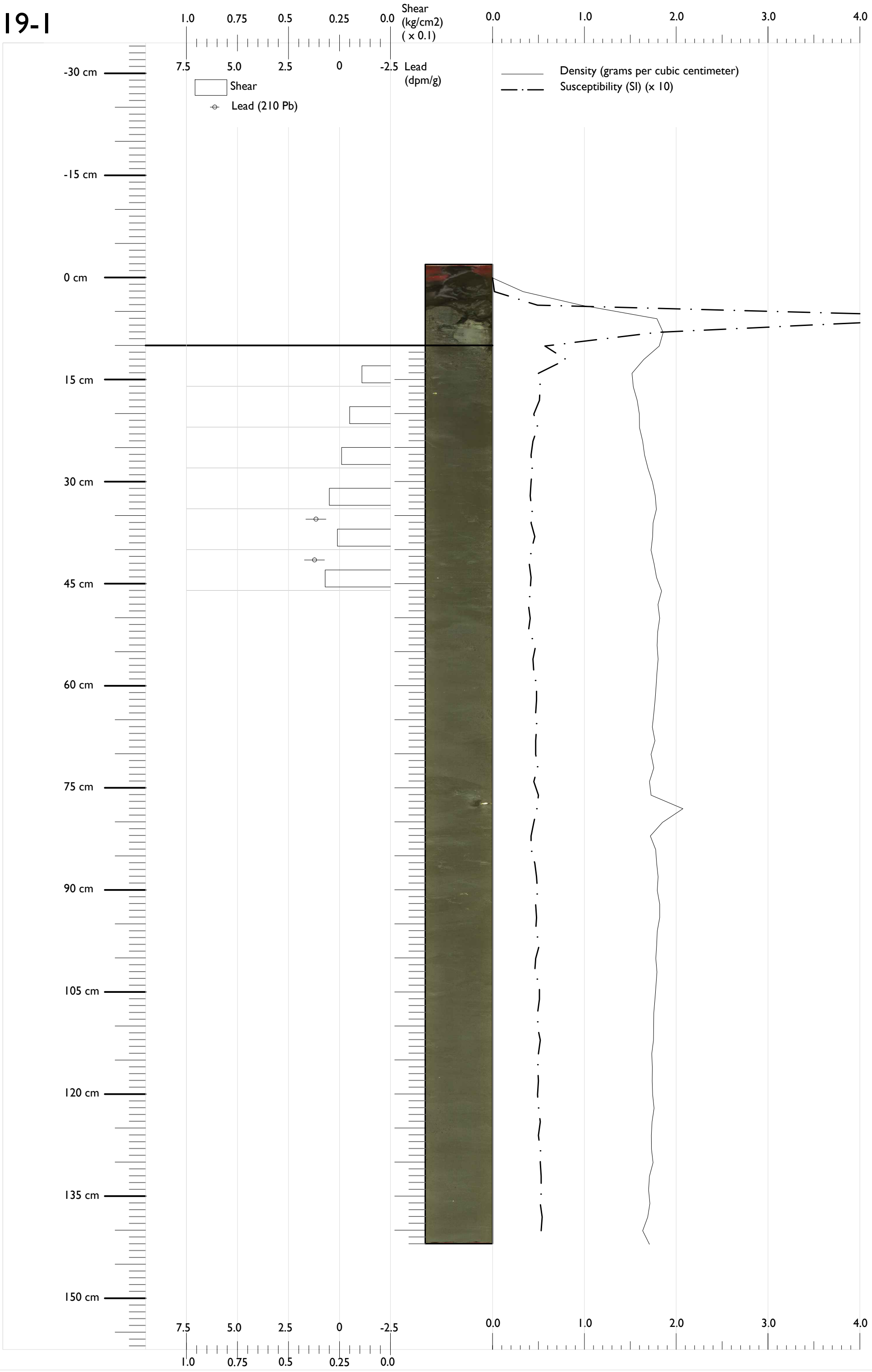
17-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

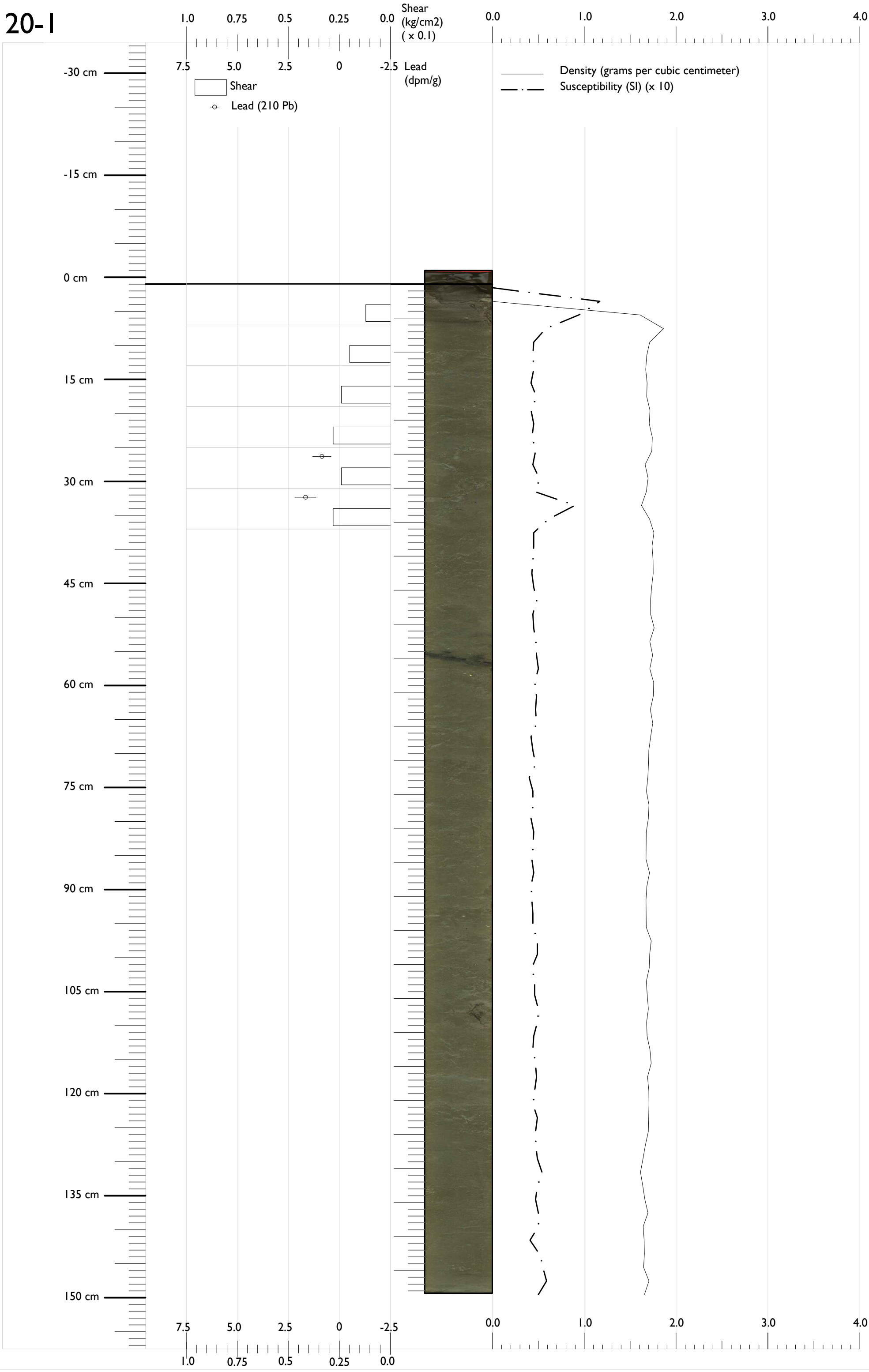
18-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

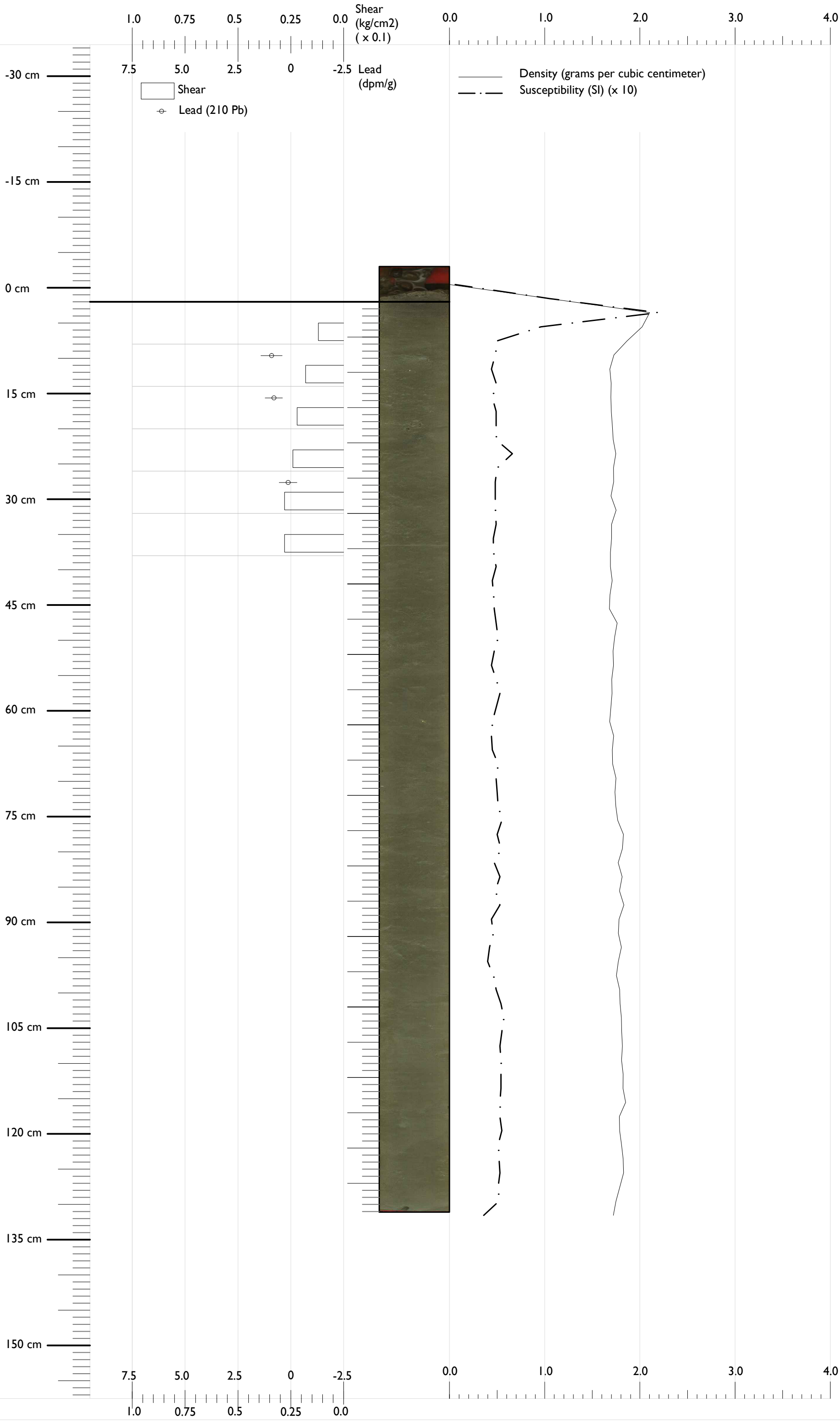
19-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

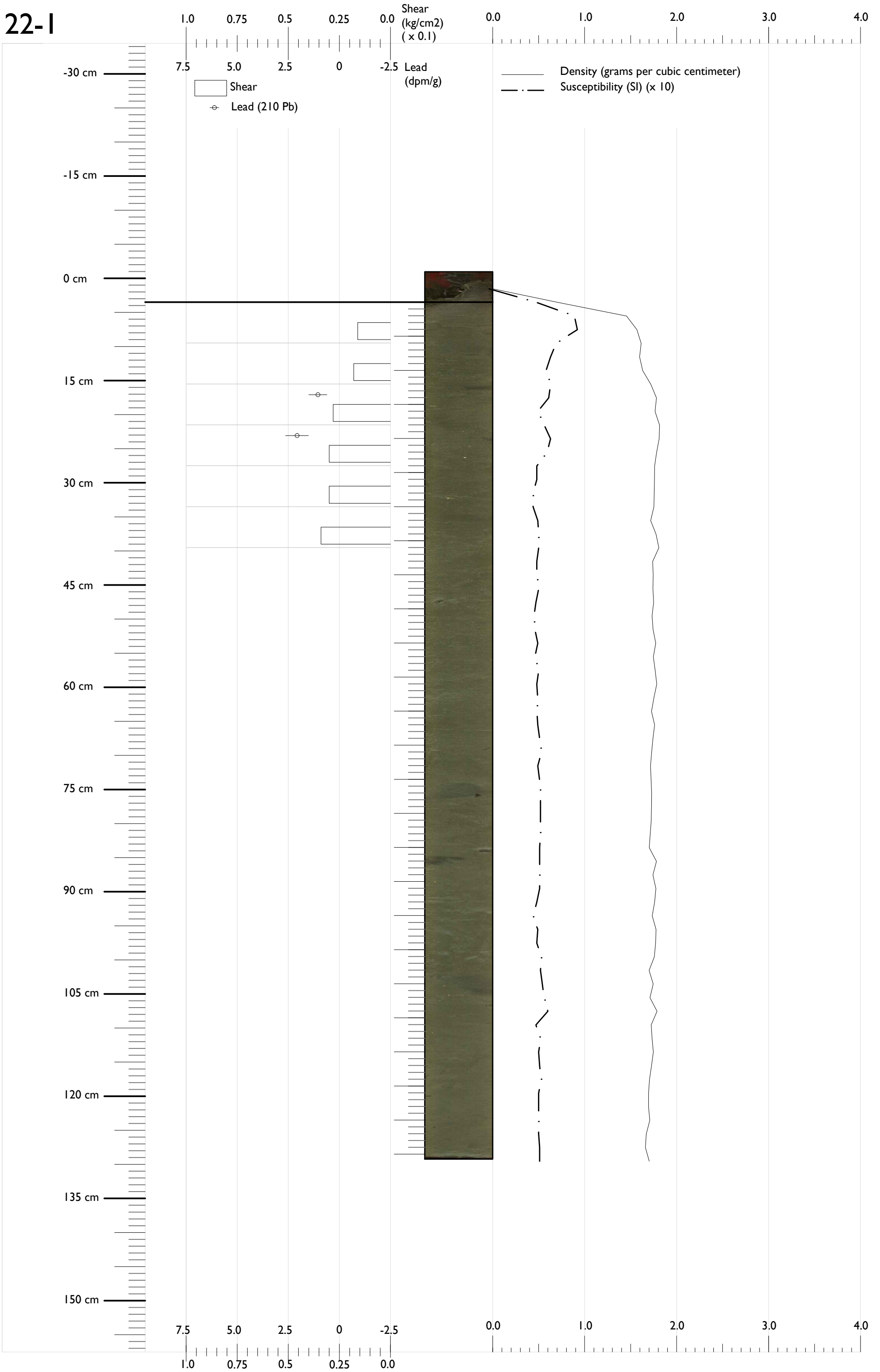
20-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

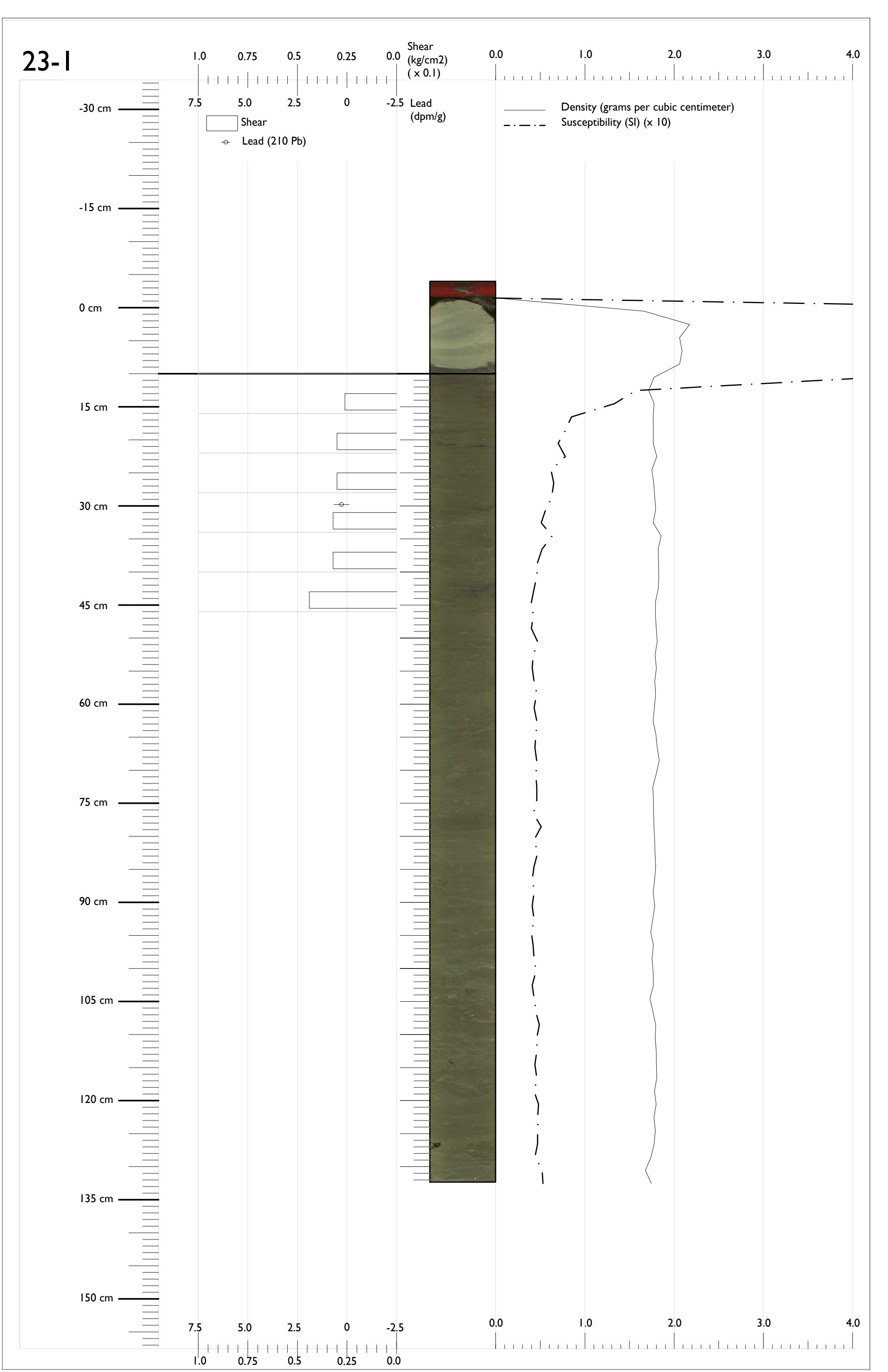
21-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

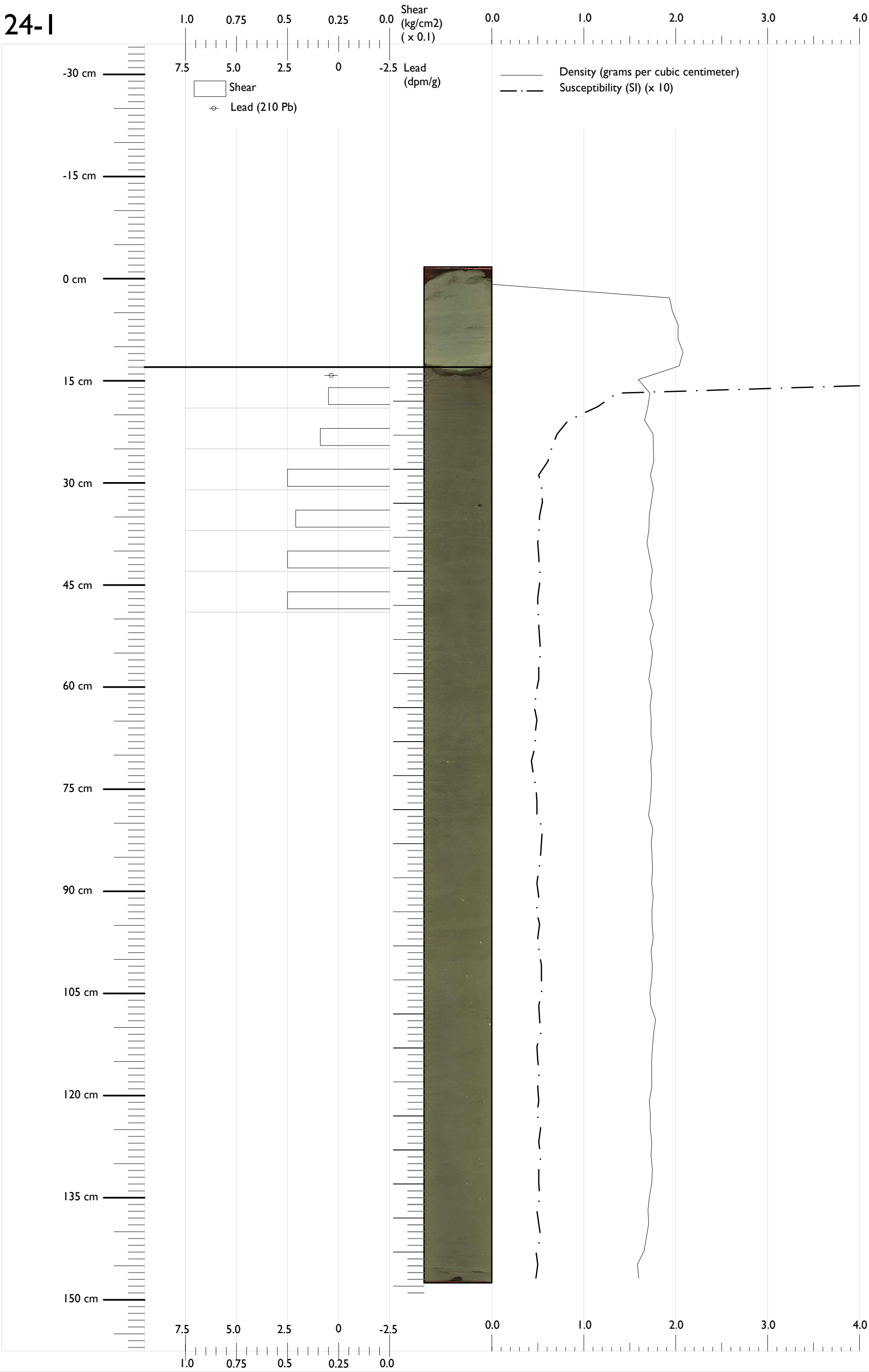
22-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

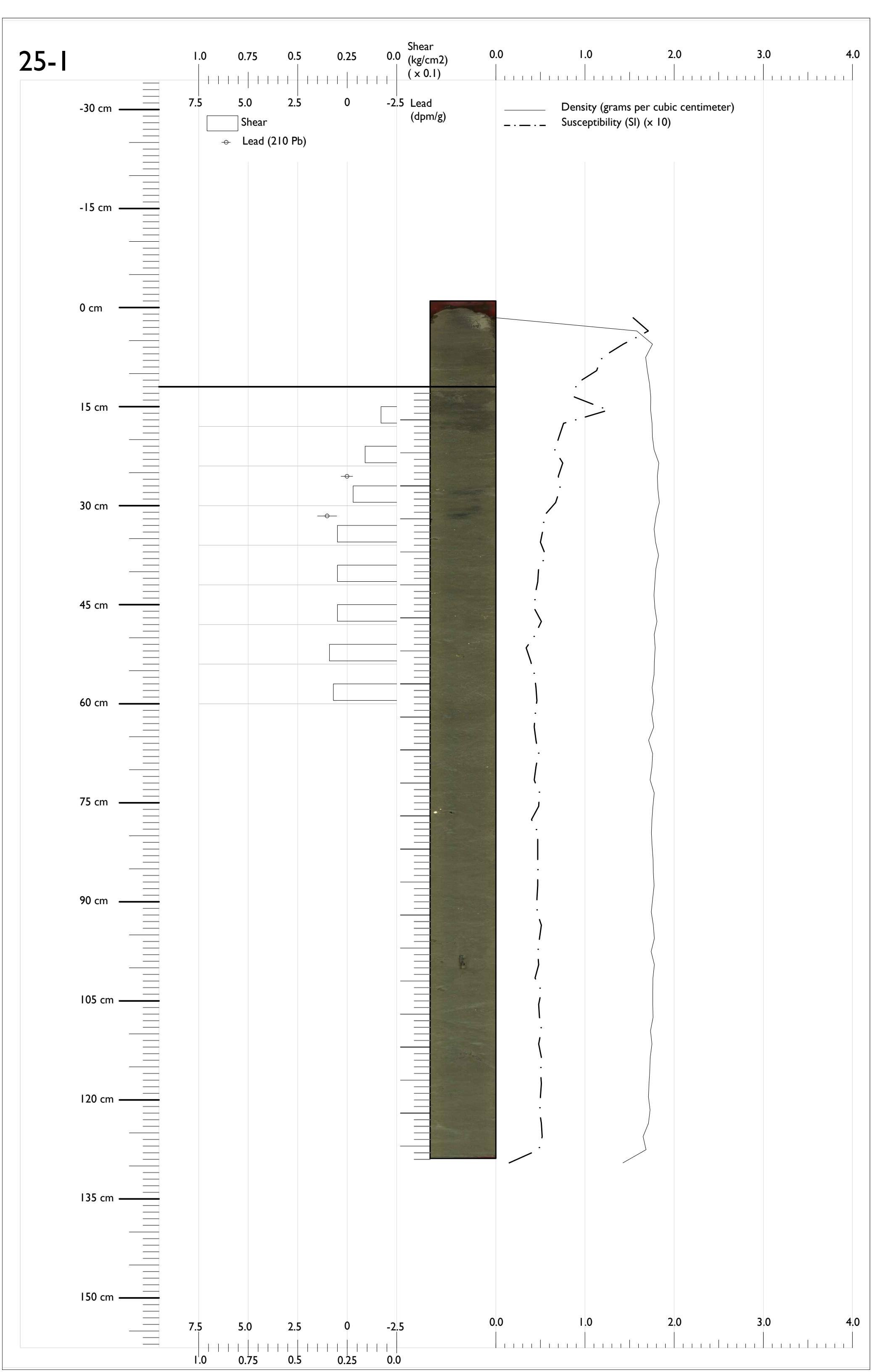
23-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

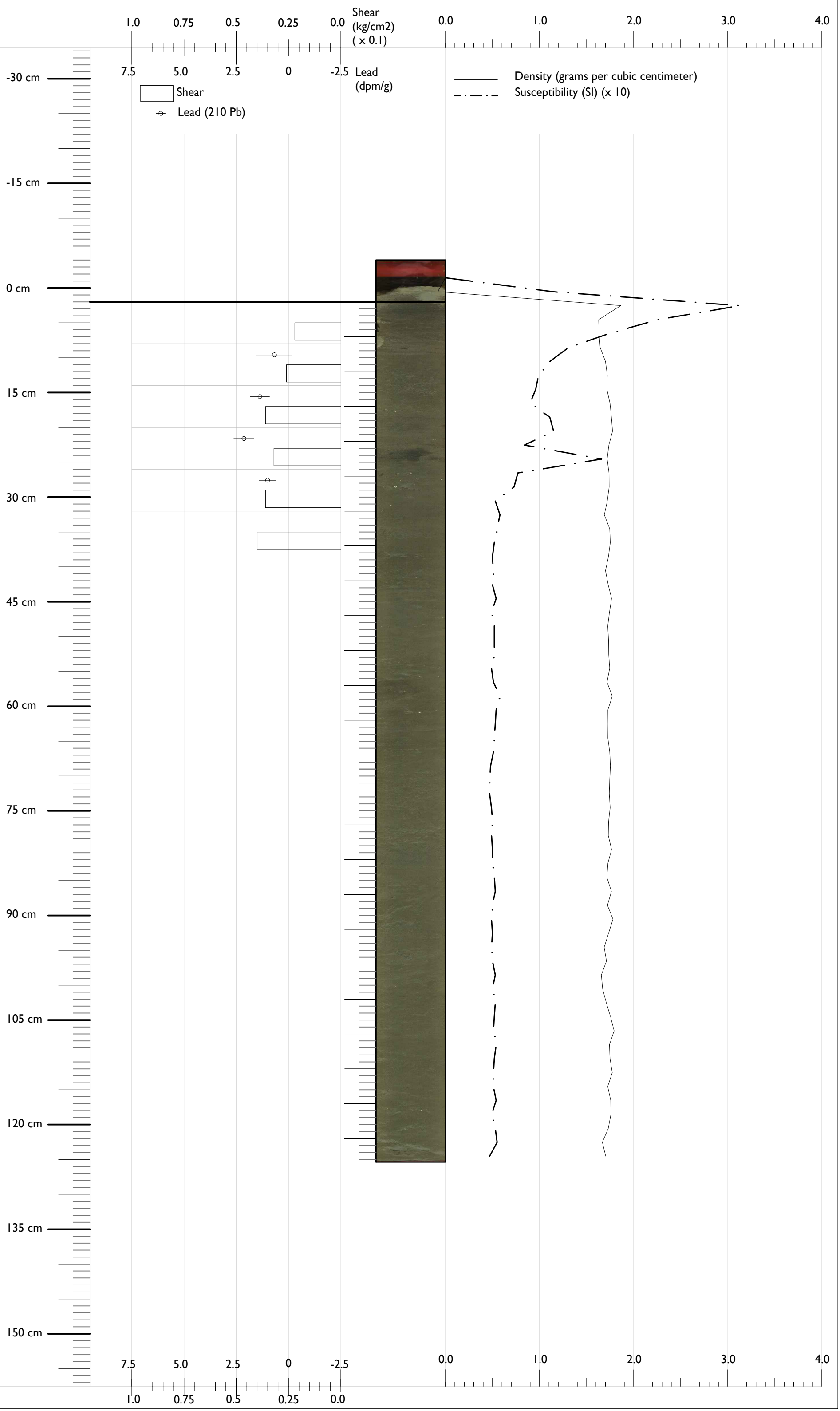
24-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

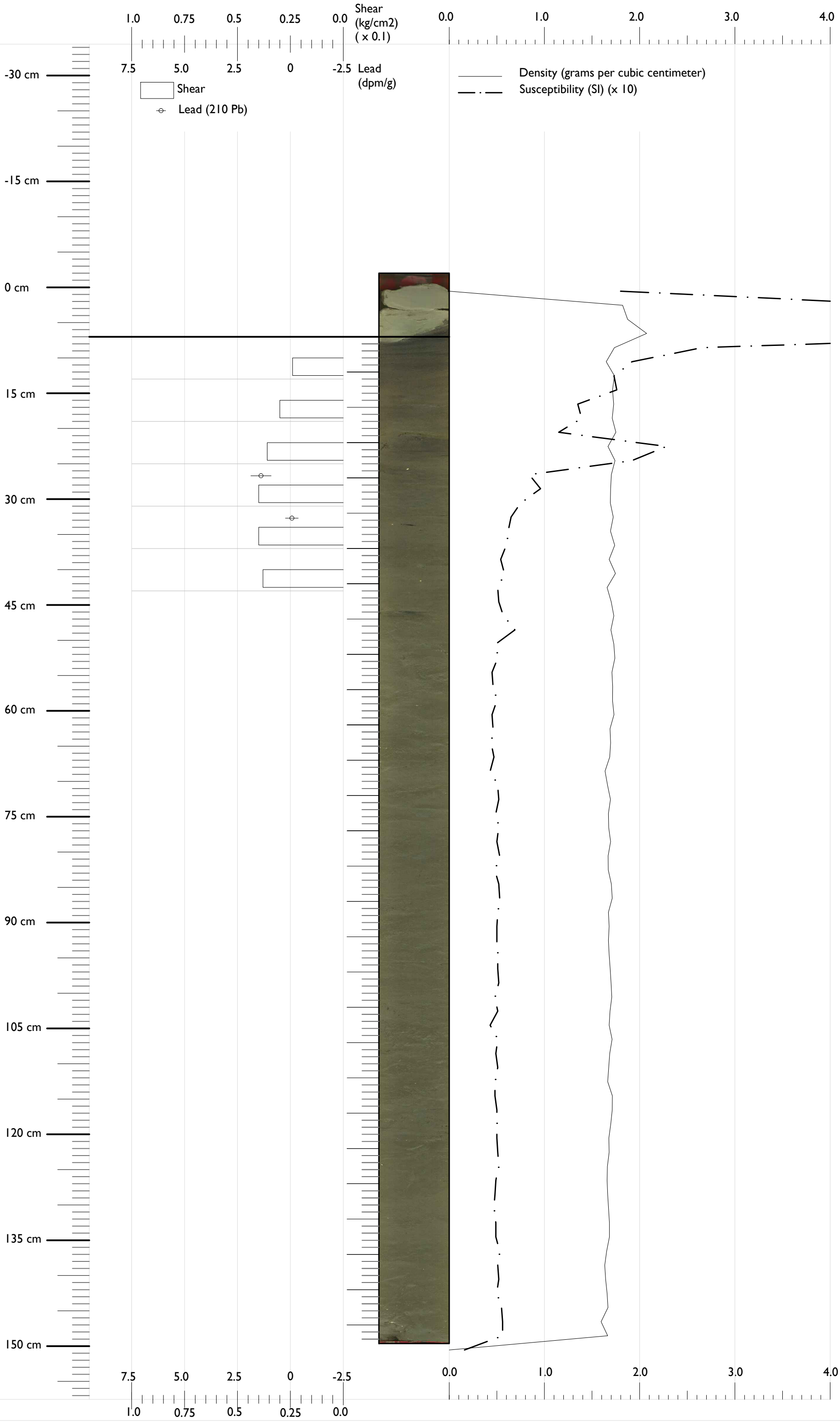
25-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

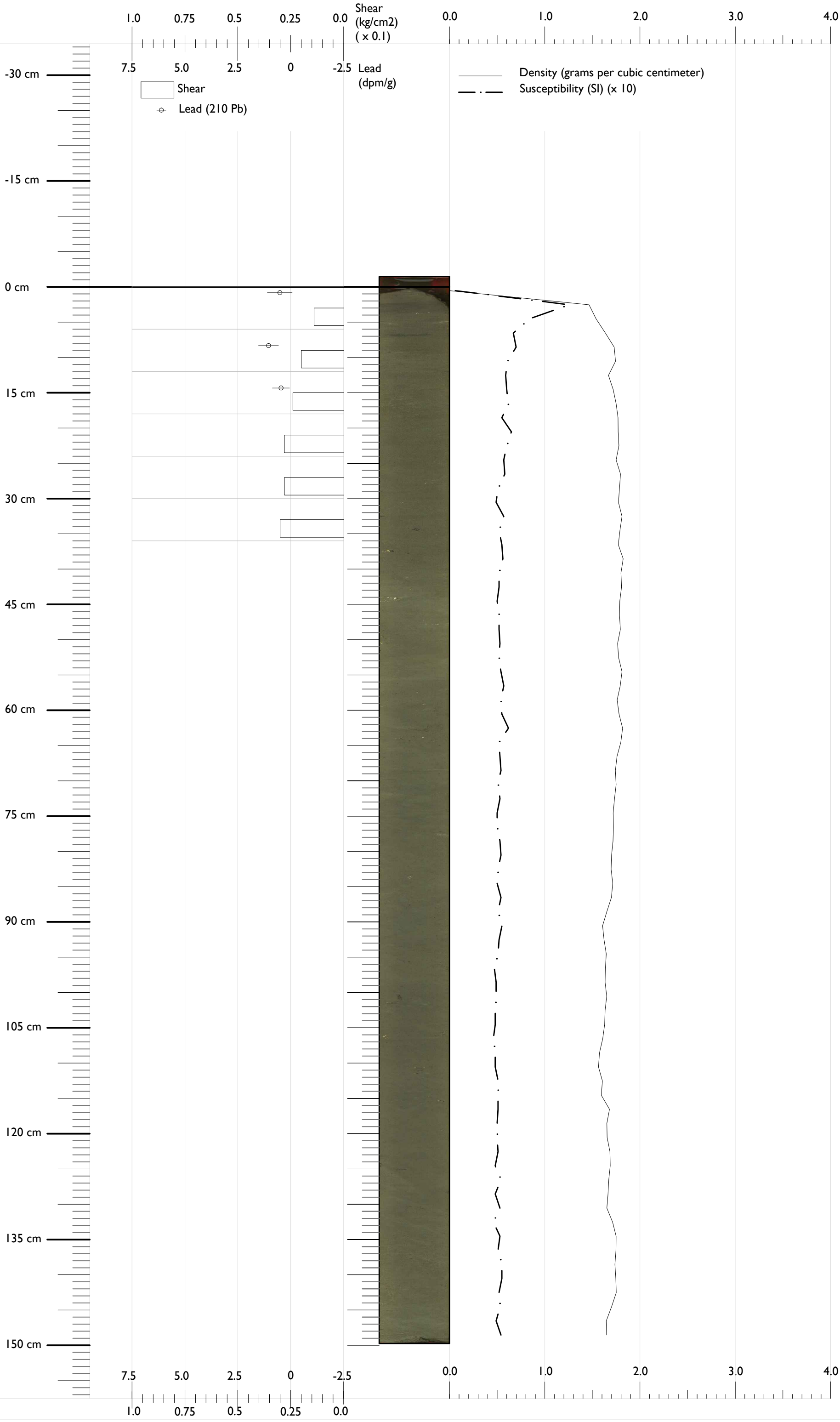
26-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

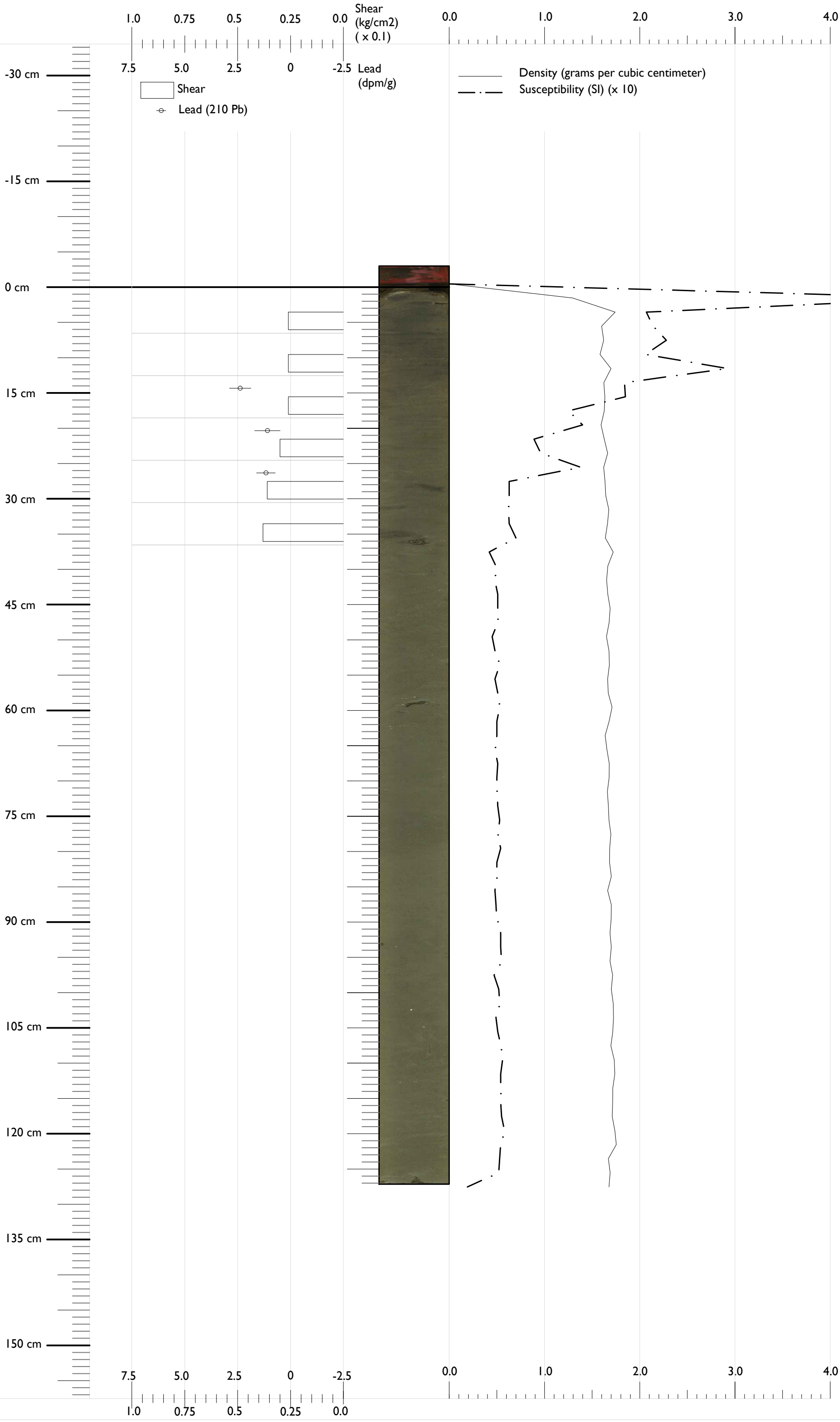
27-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

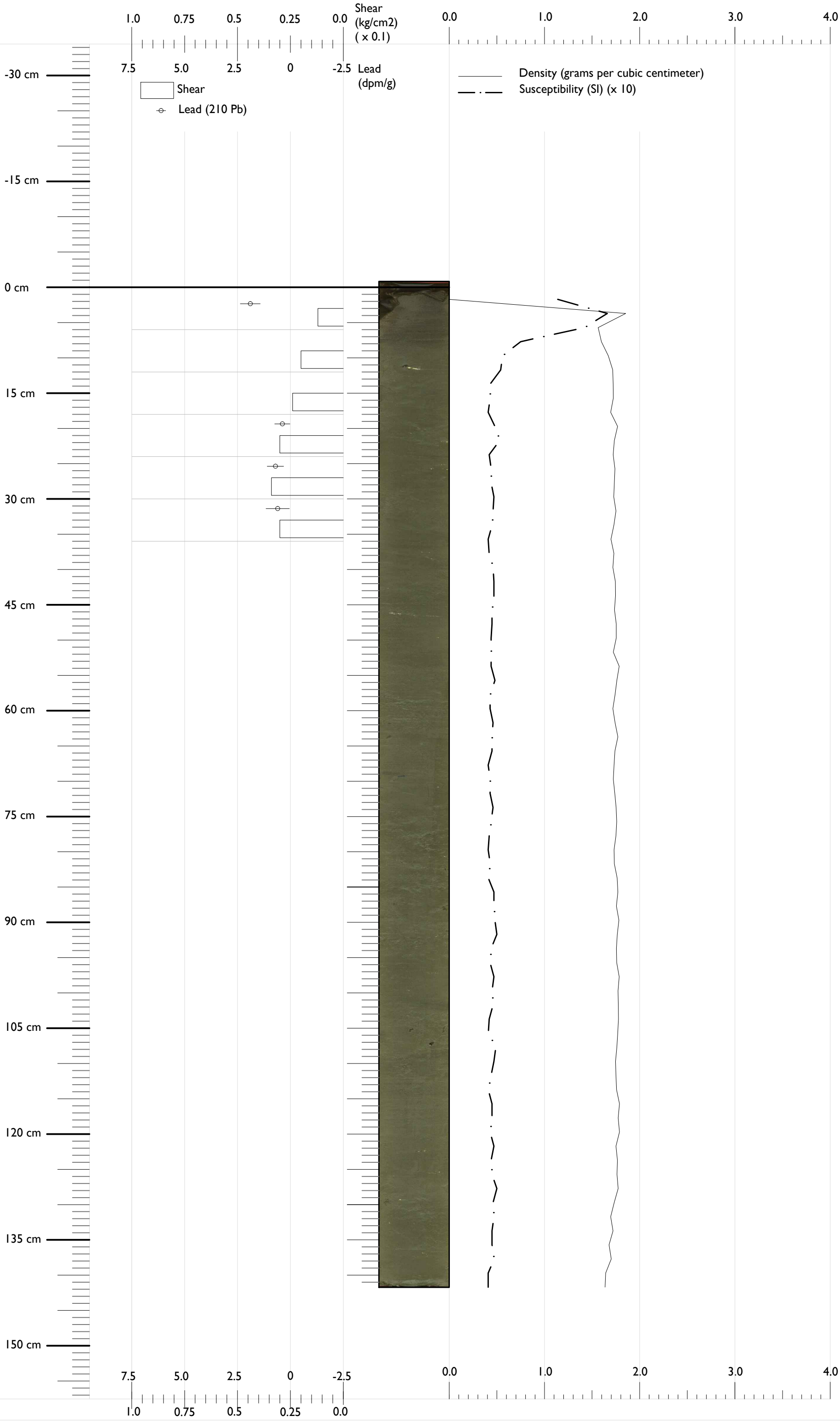
28-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

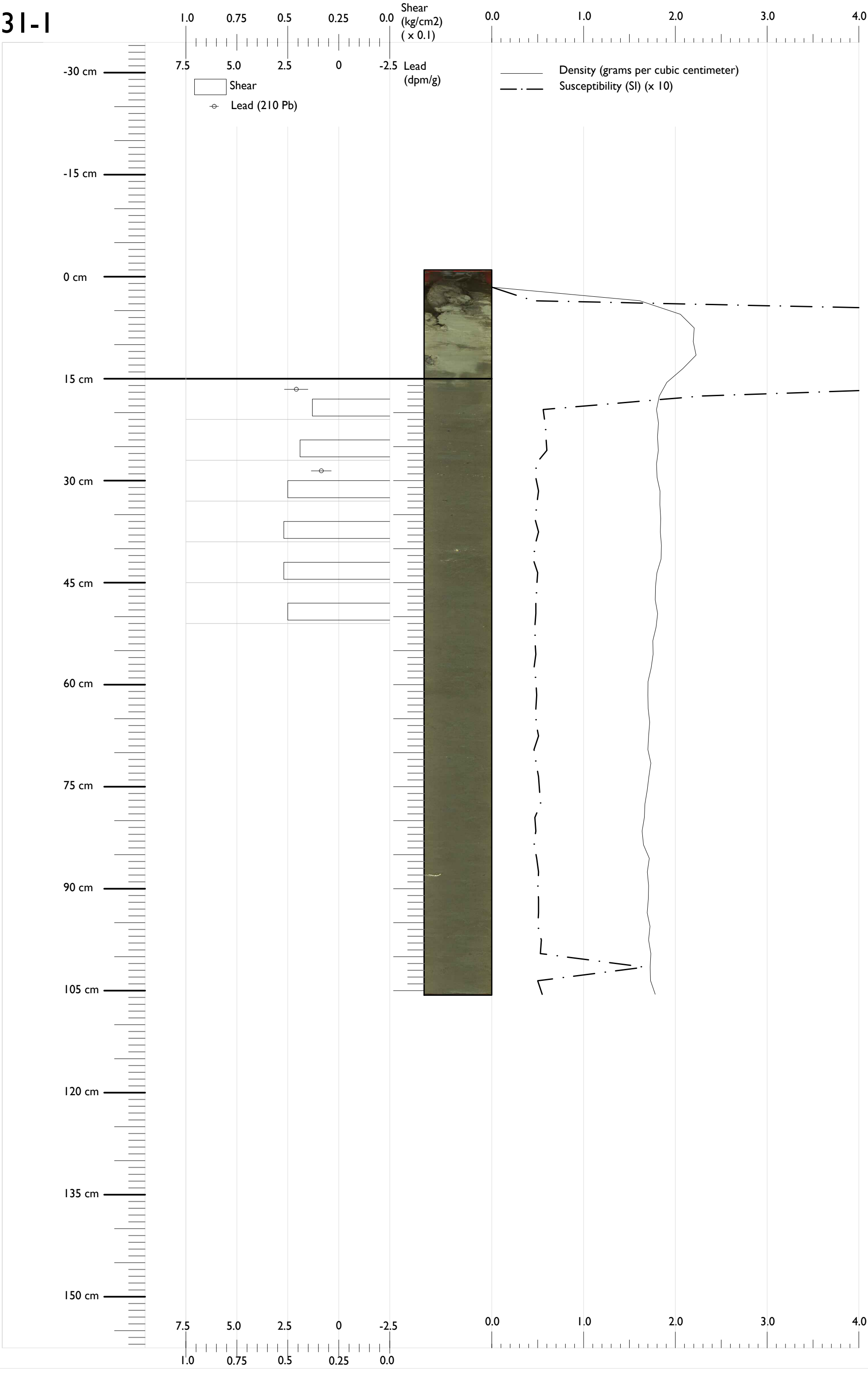
29-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

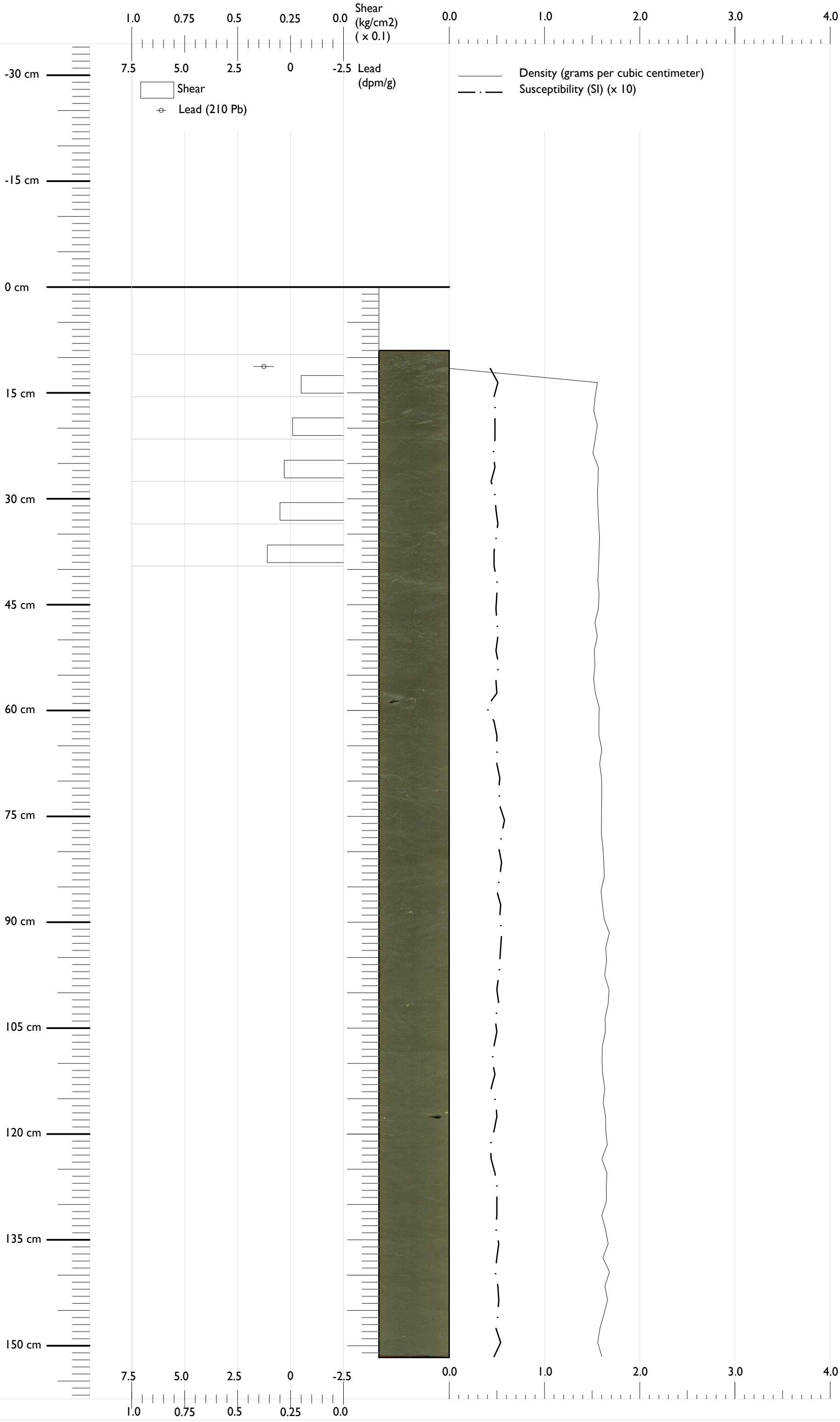
30-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

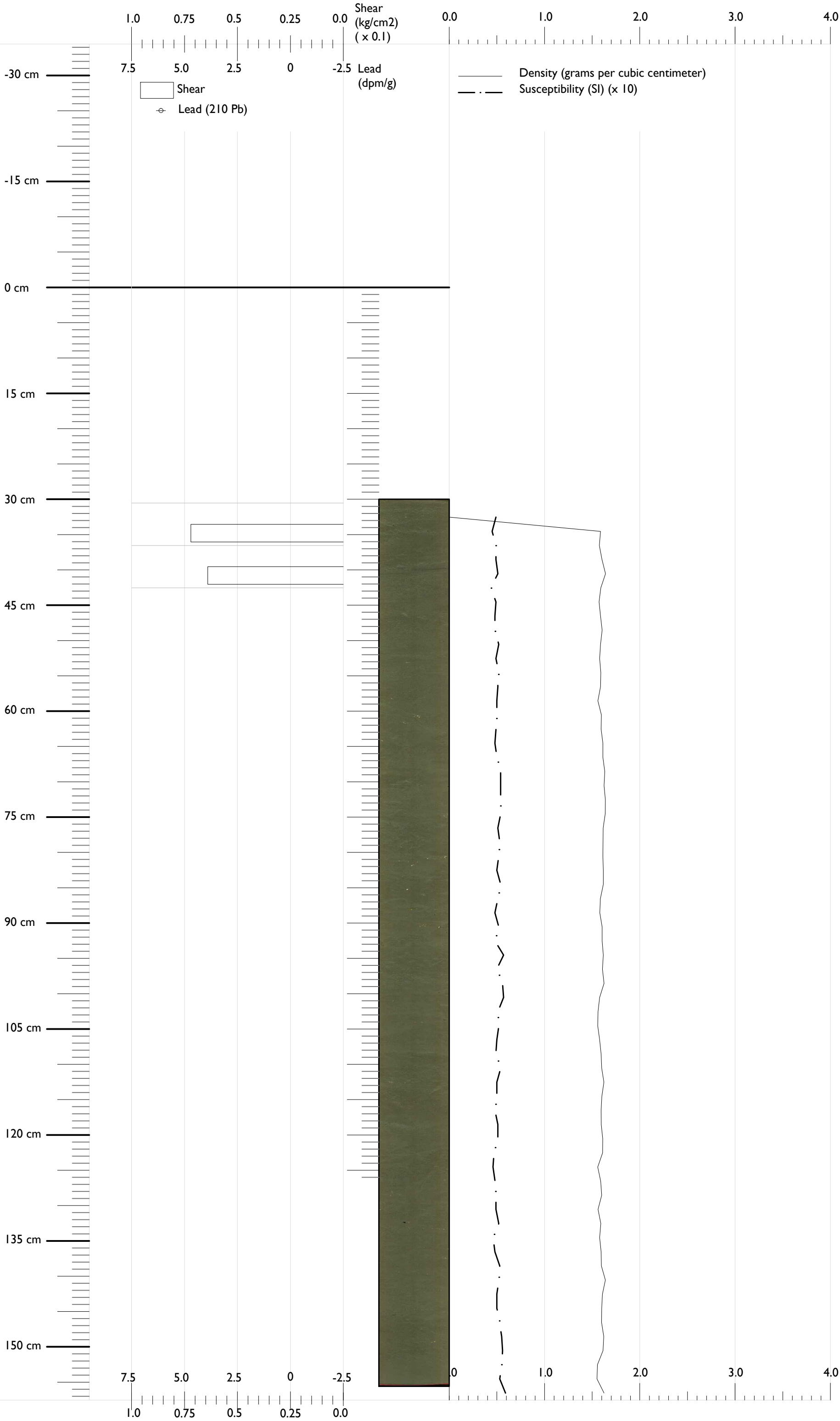
31-1


1.0
0.75
0.5
0.25
0.0
Shear (kg/cm2) (x 0.1)
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

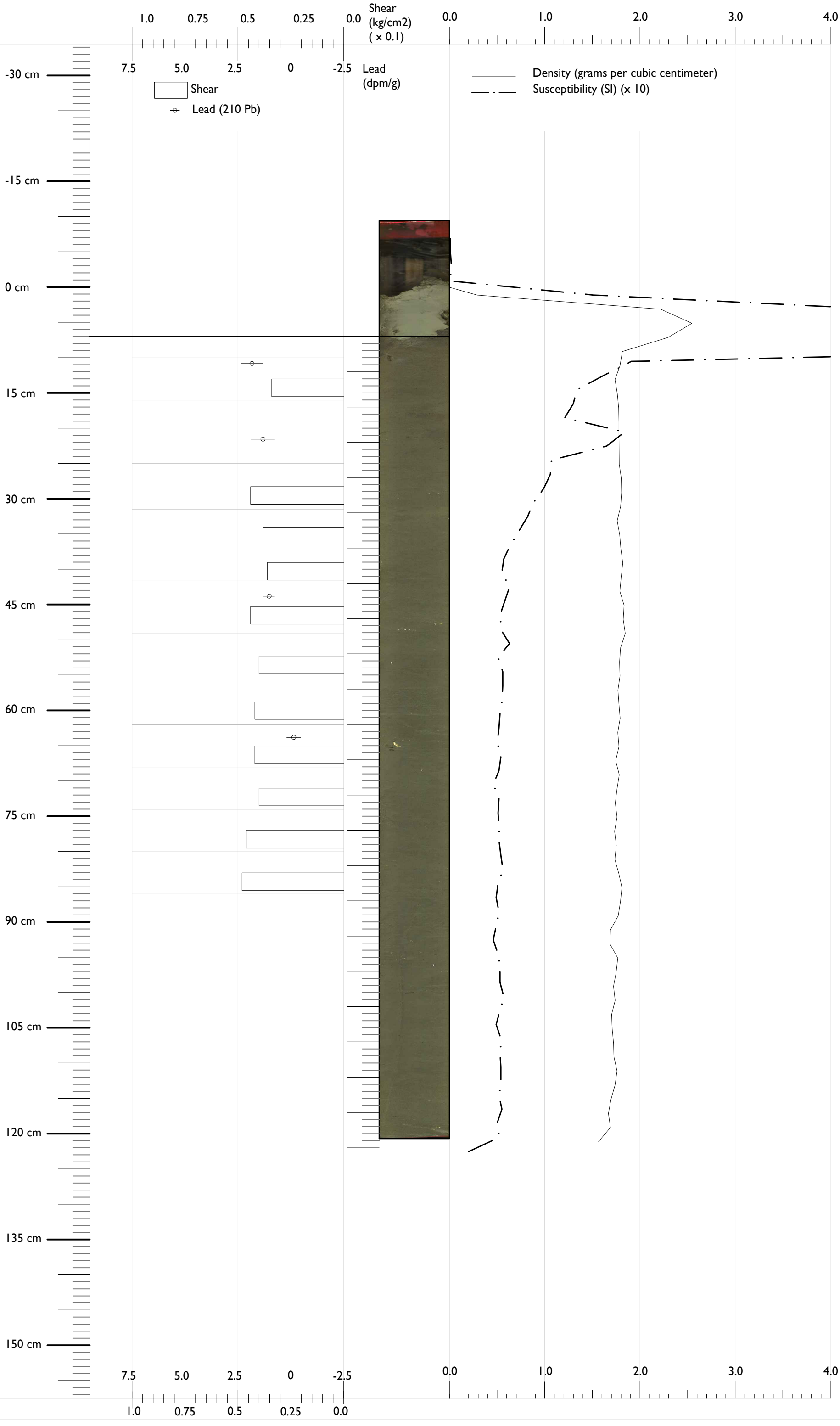
32-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

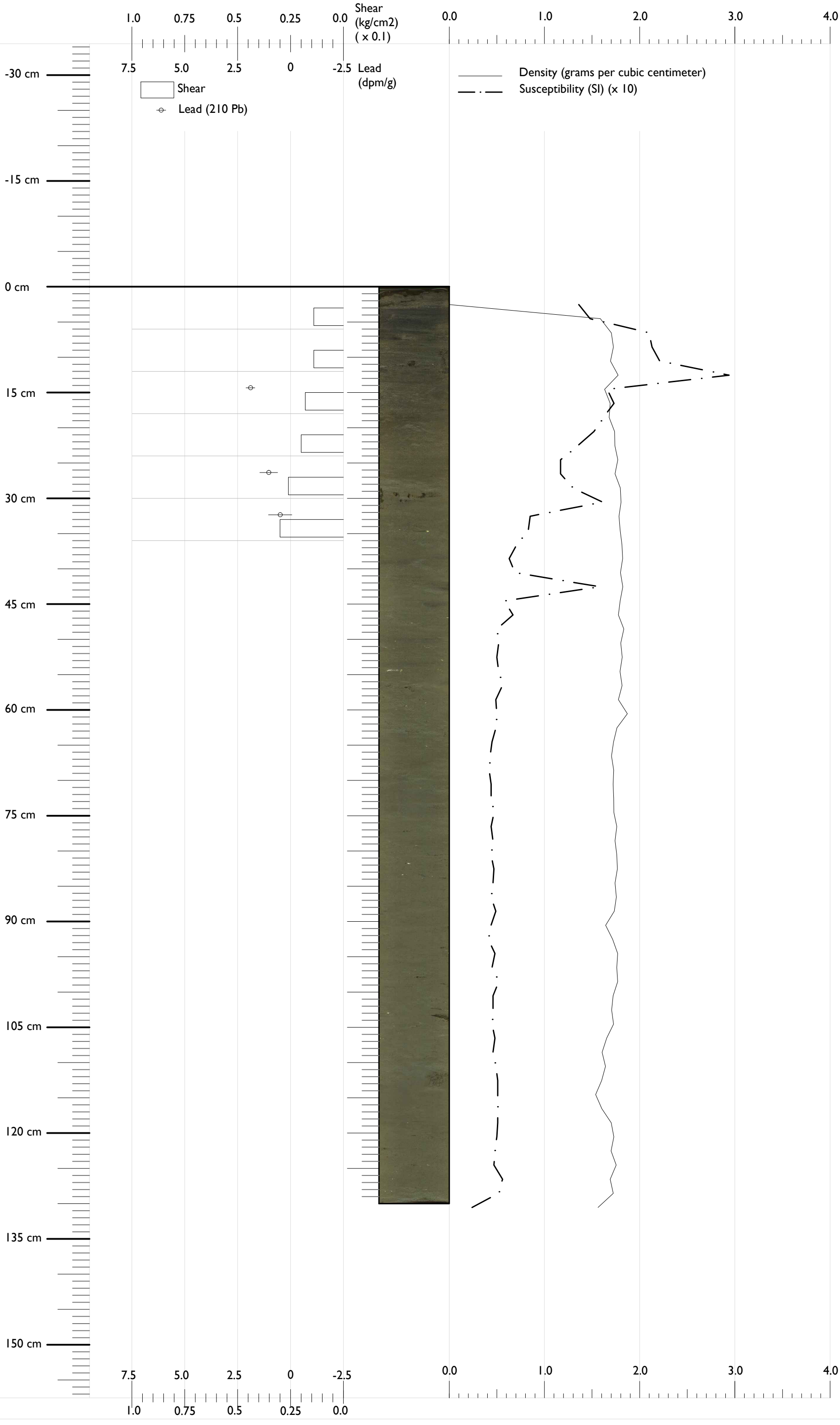
33-1


Shear
(kg/cm2)
(x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead
(dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

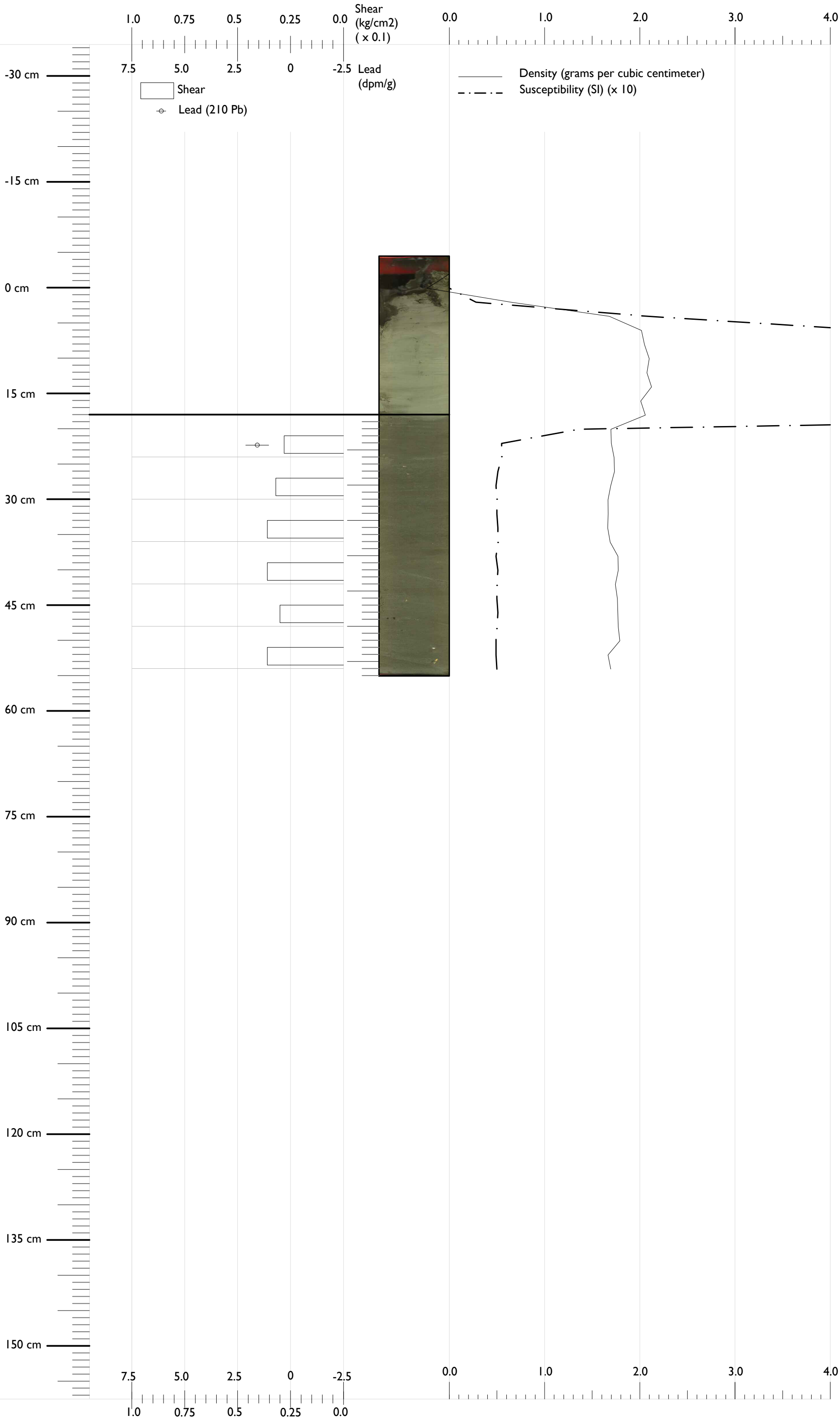
34-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
Lead (dpm/g)
7.5
5.0
2.5
0
-2.5
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

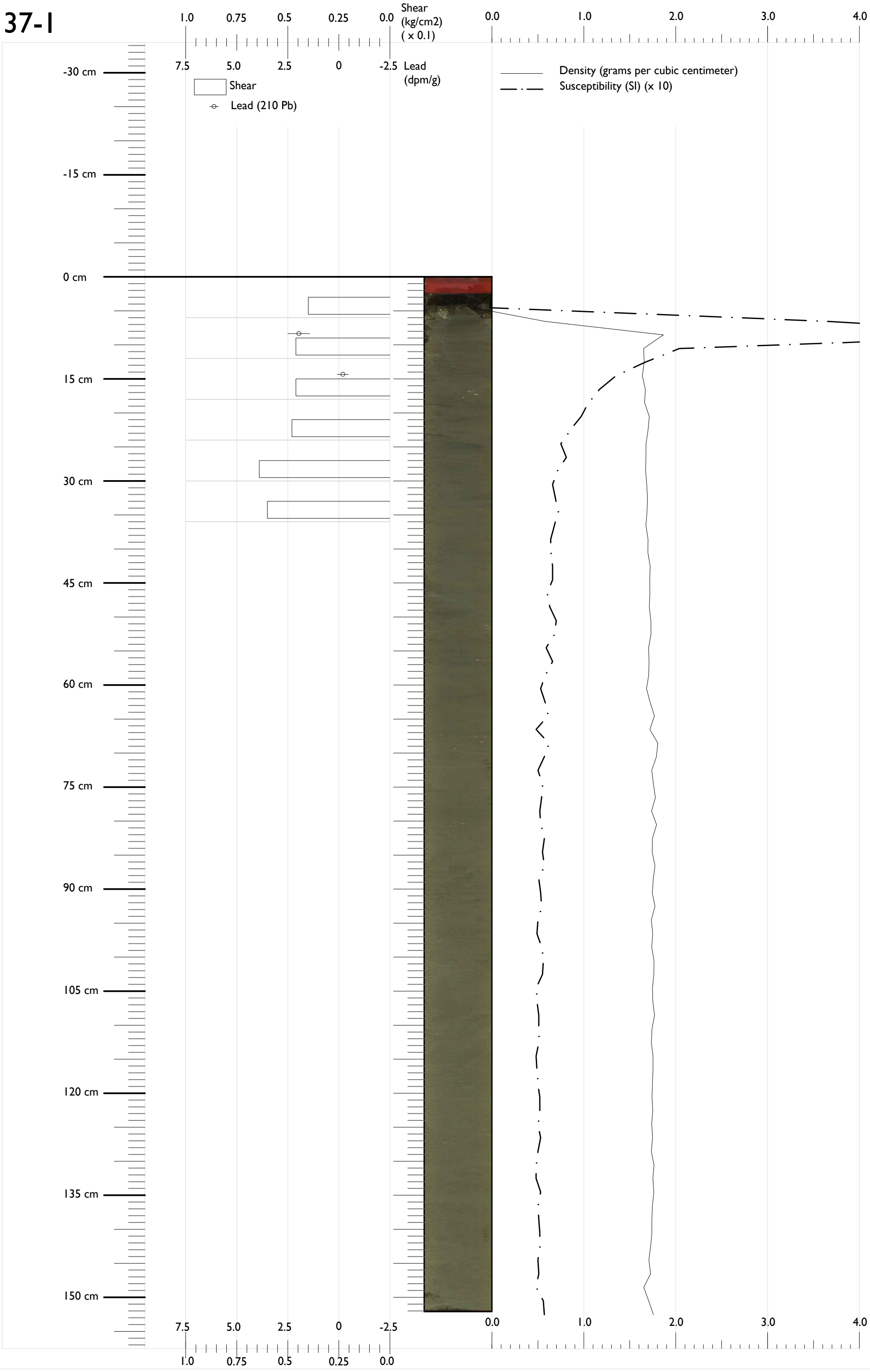
35-1


Shear
(kg/cm2)
(x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead
(dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

36-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
0.0
1.0
2.0
3.0
4.0
Shear
Lead (210 Pb)
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

37-1


Shear (kg/cm2) (x 0.1)
1.0
0.75
0.5
0.25
0.0
7.5
5.0
2.5
0
-2.5
Lead (dpm/g)
Shear
Lead (210 Pb)
0.0
1.0
2.0
3.0
4.0
Density (grams per cubic centimeter)
Susceptibility (SI) (x 10)
-30 cm
-15 cm
0 cm
15 cm
30 cm
45 cm
60 cm
75 cm
90 cm
105 cm
120 cm
135 cm
150 cm

Appendix E

Grain Size Data

Grain-Size Analysis Report

Sample: 01-4-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:49:43 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.16

D[4,3] = 31.06um = 5.01phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.32um = 8.75phi

D[v,0.5] = 11.95um = 6.39phi
D[v,0.84] = 36.7um = 4.77phi
D[v,0.95] = 62.6um = 4phi

Kurtosis = 103.38
Skewness = 9.63
Standard Deviation = 117.33 um = 3.09phi

Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

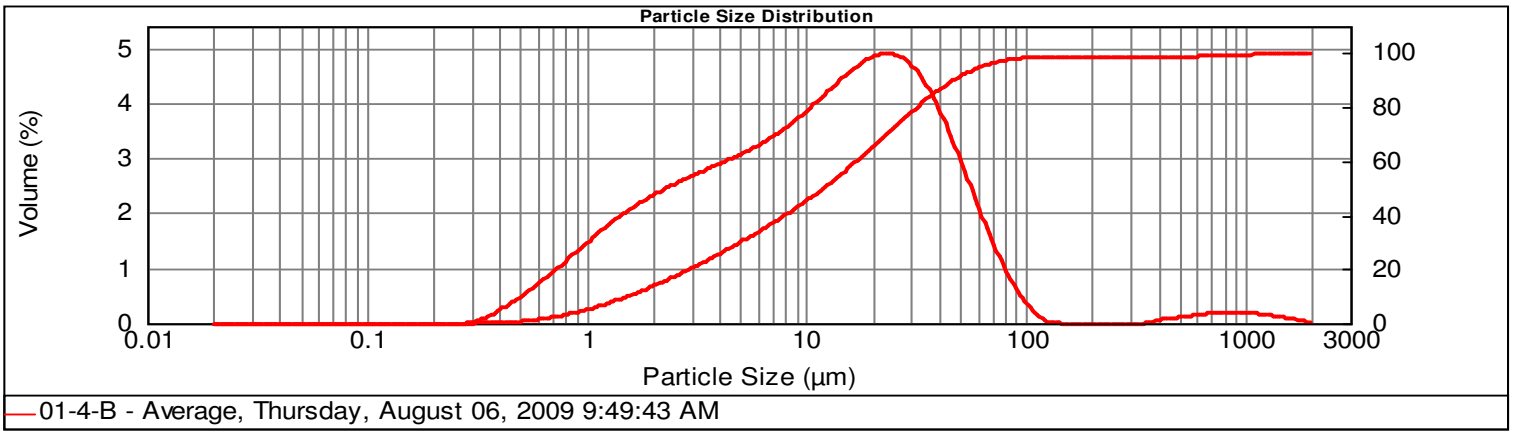
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.64 phi (Silt)

USGS
% Clay (0-2 um) = 13.7
% Fine Silt (2-3.9 um) = 11.39

d (0.1) : 1.544 **um**
d (0.5) : 11.949 **d (0.9) : 46.806**

Wentworth
% Clay (0-3.9 um) = 25.09
% Silt (3.91-31 um) = 54.01
% Coarse Silt (31 - 62.5 um) = 15.88
% Very Fine sand (62.5 - 125 um) = 3.58

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .15
% Coarse sand (500-1000 um) = .77
% Very Coarse sand (1000 - 2000 um) = .52



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.16	100
-0.5	(1414.21)	0.0	(1000.00)	0.37	99.84
0.0	(1000.00)	0.5	(707.10)	0.44	99.48
0.5	(707.10)	1.0	(500.00)	0.33	99.04
1.0	(500.00)	1.5	(353.55)	0.15	98.71
1.5	(353.55)	2.0	(250.00)	0	98.56
2.0	(250.00)	2.5	(176.78)	0	98.56
2.5	(176.78)	3.0	(125.00)	0	98.56
3.0	(125.00)	3.5	(88.39)	0.67	98.56
3.5	(88.39)	4.0	(62.50)	2.91	97.89
4.0	(62.50)	4.5	(44.19)	6.26	94.98
4.5	(44.19)	5.0	(31.25)	9.38	88.72
5.0	(31.25)	5.5	(22.10)	10.94	79.34
5.5	(22.10)	6.0	(15.63)	10.78	68.39
6.0	(15.63)	6.5	(11.05)	9.69	57.61
6.5	(11.05)	7.0	(7.81)	8.48	47.92
7.0	(7.81)	7.5	(5.52)	7.52	39.44
7.5	(5.52)	8.0	(3.90)	6.81	31.92
8.0	(3.90)	8.5	(2.76)	6.21	25.12
8.5	(2.76)	9.0	(1.95)	5.57	18.91
9.0	(1.95)	9.5	(1.38)	4.78	13.34
9.5	(1.38)	10.0	(0.98)	3.78	8.56
10.0	(0.98)	10.5	(0.69)	2.63	4.78
10.5	(0.69)	11.0	(0.49)	1.51	2.15
11.0	(0.49)	11.5	(0.35)	0.59	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-4-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:54:19 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.08

D[4,3] = 29.06um = 5.1phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.62um = 8.58phi

D[v,0.5] = 15.13um = 6.05phi
D[v,0.84] = 42.61um = 4.55phi
D[v,0.95] = 67.97um = 3.88phi

Kurtosis = 108.76
Skewness = 9.86
Standard Deviation = 81.22 um = 3.62phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

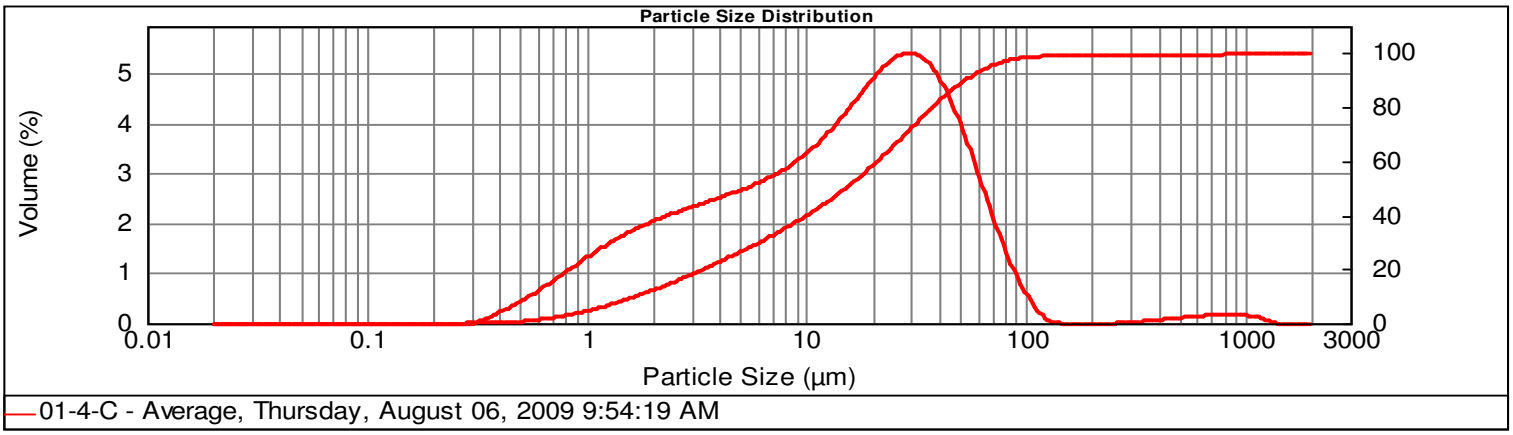
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.25
% Fine Silt (2-3.9 um) = 9.91

d (0.1) : 1.679 **um**
d (0.5) : 15.127 **d (0.9) : 52.864**

Wentworth
% Clay (0-3.9 um) = 22.15
% Silt (3.91-31 um) = 51.15
% Coarse Silt (31 - 62.5 um) = 20.28
% Very Fine sand (62.5 - 125 um) = 5.33

% Fine sand (125-250 um) = .01
% Medium sand (250-500 um) = .2
% Coarse sand (500-1000 um) = .69
% Very Coarse sand (1000 - 2000 um) = .19



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.19	100
0.0	(1000.00)	0.5	(707.10)	0.38	99.81
0.5	(707.10)	1.0	(500.00)	0.31	99.43
1.0	(500.00)	1.5	(353.55)	0.17	99.13
1.5	(353.55)	2.0	(250.00)	0.03	98.96
2.0	(250.00)	2.5	(176.78)	0	98.93
2.5	(176.78)	3.0	(125.00)	0.01	98.93
3.0	(125.00)	3.5	(88.39)	1.06	98.92
3.5	(88.39)	4.0	(62.50)	4.27	97.85
4.0	(62.50)	4.5	(44.19)	8.47	93.59
4.5	(44.19)	5.0	(31.25)	11.52	85.11
5.0	(31.25)	5.5	(22.10)	12.04	73.59
5.5	(22.10)	6.0	(15.63)	10.65	61.55
6.0	(15.63)	6.5	(11.05)	8.84	50.9
6.5	(11.05)	7.0	(7.81)	7.44	42.06
7.0	(7.81)	7.5	(5.52)	6.53	34.62
7.5	(5.52)	8.0	(3.90)	5.91	28.09
8.0	(3.90)	8.5	(2.76)	5.39	22.18
8.5	(2.76)	9.0	(1.95)	4.86	16.79
9.0	(1.95)	9.5	(1.38)	4.22	11.93
9.5	(1.38)	10.0	(0.98)	3.38	7.72
10.0	(0.98)	10.5	(0.69)	2.38	4.34
10.5	(0.69)	11.0	(0.49)	1.38	1.96
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-4-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:58:59 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.14

D[4,3] = 29.72um = 5.07phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.6um = 8.58phi

D[v,0.5] = 15.16um = 6.04phi
D[v,0.84] = 42.6um = 4.55phi
D[v,0.95] = 67.95um = 3.88phi

Kurtosis = 103.69
Skewness = 9.71
Standard Deviation = 86.45 um = 3.53phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

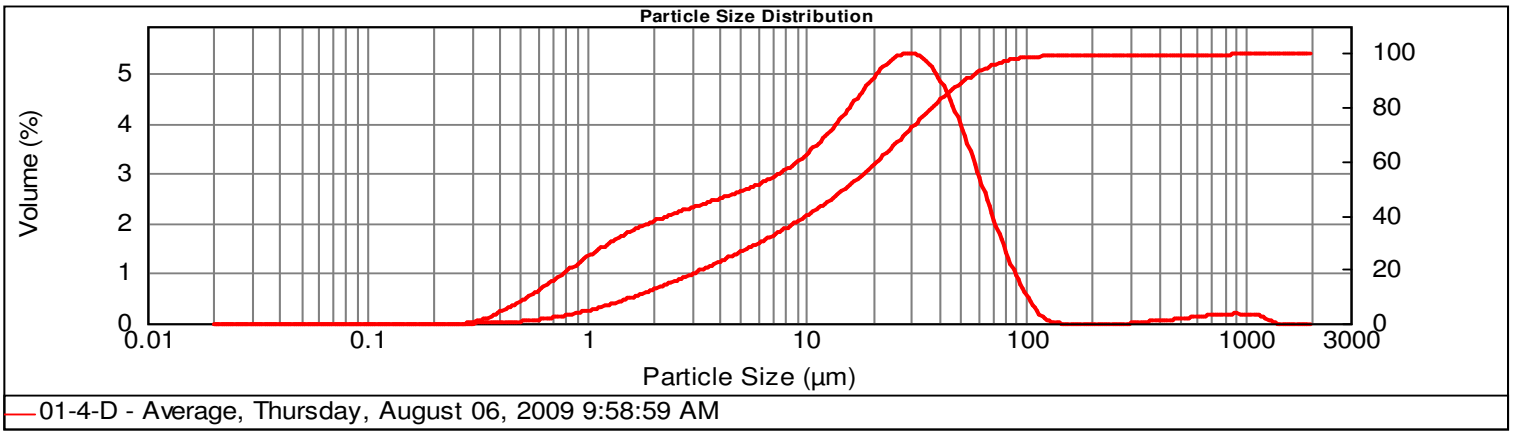
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.32
% Fine Silt (2-3.9 um) = 9.88

d (0.1) : 1.670 **um**
d (0.5) : 15.164 **d (0.9) : 52.851**

Wentworth
% Clay (0-3.9 um) = 22.2
% Silt (3.91-31 um) = 51.1
% Coarse Silt (31 - 62.5 um) = 20.29
% Very Fine sand (62.5 - 125 um) = 5.31

% Fine sand (125-250 um) = .01
% Medium sand (250-500 um) = .14
% Coarse sand (500-1000 um) = .7
% Very Coarse sand (1000 - 2000 um) = .25



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.25	100
0.0	(1000.00)	0.5	(707.10)	0.41	99.75
0.5	(707.10)	1.0	(500.00)	0.29	99.34
1.0	(500.00)	1.5	(353.55)	0.13	99.05
1.5	(353.55)	2.0	(250.00)	0.01	98.92
2.0	(250.00)	2.5	(176.78)	0	98.91
2.5	(176.78)	3.0	(125.00)	0.01	98.91
3.0	(125.00)	3.5	(88.39)	1.05	98.9
3.5	(88.39)	4.0	(62.50)	4.26	97.85
4.0	(62.50)	4.5	(44.19)	8.47	93.59
4.5	(44.19)	5.0	(31.25)	11.53	85.12
5.0	(31.25)	5.5	(22.10)	12.07	73.59
5.5	(22.10)	6.0	(15.63)	10.69	61.52
6.0	(15.63)	6.5	(11.05)	8.85	50.83
6.5	(11.05)	7.0	(7.81)	7.41	41.98
7.0	(7.81)	7.5	(5.52)	6.48	34.57
7.5	(5.52)	8.0	(3.90)	5.86	28.09
8.0	(3.90)	8.5	(2.76)	5.37	22.23
8.5	(2.76)	9.0	(1.95)	4.86	16.86
9.0	(1.95)	9.5	(1.38)	4.23	12
9.5	(1.38)	10.0	(0.98)	3.4	7.78
10.0	(0.98)	10.5	(0.69)	2.4	4.38
10.5	(0.69)	11.0	(0.49)	1.39	1.98
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 11:53:32 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.75

D[4,3] = 25.37um = 5.3phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 13.27um = 6.24phi
D[v,0.84] = 39.5um = 4.66phi
D[v,0.95] = 68.21um = 3.87phi

Kurtosis = 100.82
Skewness = 9.09
Standard Deviation = 57.54 um = 4.12phi

Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

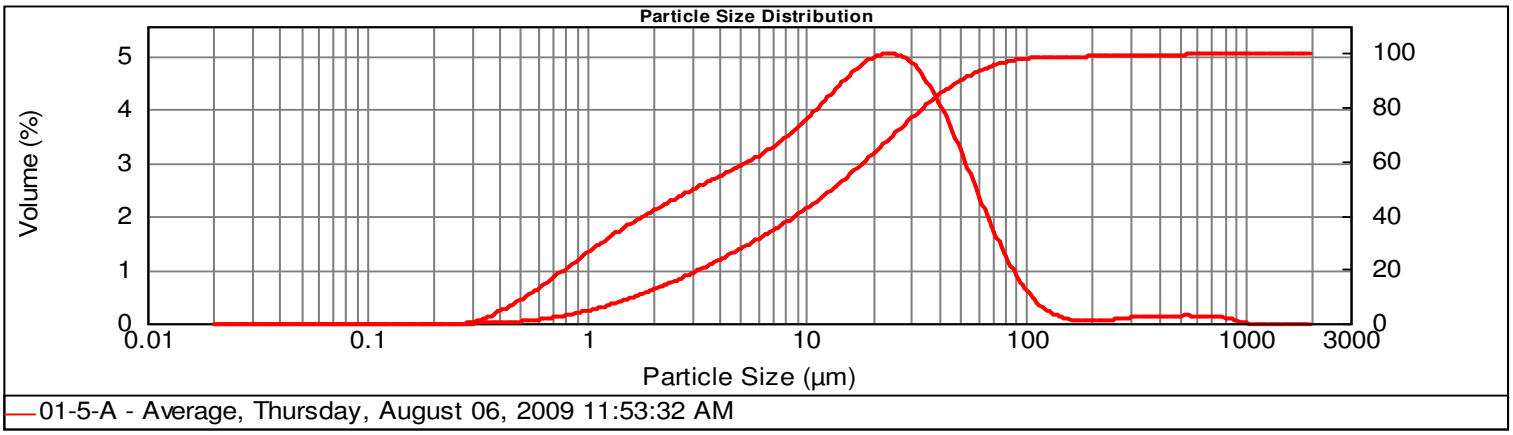
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 12.33
% Fine Silt (2-3.9 um) = 10.53

d (0.1) : 1.674 **um**
d (0.5) : 13.269 **d (0.9) : 50.546**

Wentworth
% Clay (0-3.9 um) = 22.86
% Silt (3.91-31 um) = 53.96
% Coarse Silt (31 - 62.5 um) = 16.99
% Very Fine sand (62.5 - 125 um) = 4.78

% Fine sand (125-250 um) = .39
% Medium sand (250-500 um) = .53
% Coarse sand (500-1000 um) = .49
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0.18	100
0.5	(707.10)	1.0	(500.00)	0.31	99.82
1.0	(500.00)	1.5	(353.55)	0.3	99.51
1.5	(353.55)	2.0	(250.00)	0.23	99.21
2.0	(250.00)	2.5	(176.78)	0.14	98.98
2.5	(176.78)	3.0	(125.00)	0.25	98.84
3.0	(125.00)	3.5	(88.39)	1.22	98.59
3.5	(88.39)	4.0	(62.50)	3.57	97.37
4.0	(62.50)	4.5	(44.19)	6.88	93.81
4.5	(44.19)	5.0	(31.25)	9.86	86.93
5.0	(31.25)	5.5	(22.10)	11.29	77.07
5.5	(22.10)	6.0	(15.63)	11	65.78
6.0	(15.63)	6.5	(11.05)	9.74	54.78
6.5	(11.05)	7.0	(7.81)	8.36	45.03
7.0	(7.81)	7.5	(5.52)	7.29	36.67
7.5	(5.52)	8.0	(3.90)	6.5	29.39
8.0	(3.90)	8.5	(2.76)	5.8	22.89
8.5	(2.76)	9.0	(1.95)	5.07	17.08
9.0	(1.95)	9.5	(1.38)	4.28	12.01
9.5	(1.38)	10.0	(0.98)	3.38	7.72
10.0	(0.98)	10.5	(0.69)	2.37	4.35
10.5	(0.69)	11.0	(0.49)	1.38	1.98
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 11:58:27 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.24

D[4,3] = 32.27um = 4.95phi
D[v,0.05] = 1.06um = 9.89phi
D[v,0.16] = 2.59um = 8.59phi

D[v,0.5] = 13.27um = 6.24phi
D[v,0.84] = 39.13um = 4.68phi
D[v,0.95] = 70.79um = 3.82phi

Kurtosis = 109.46
Skewness = 9.71
Standard Deviation = 109.25 um = 3.19phi

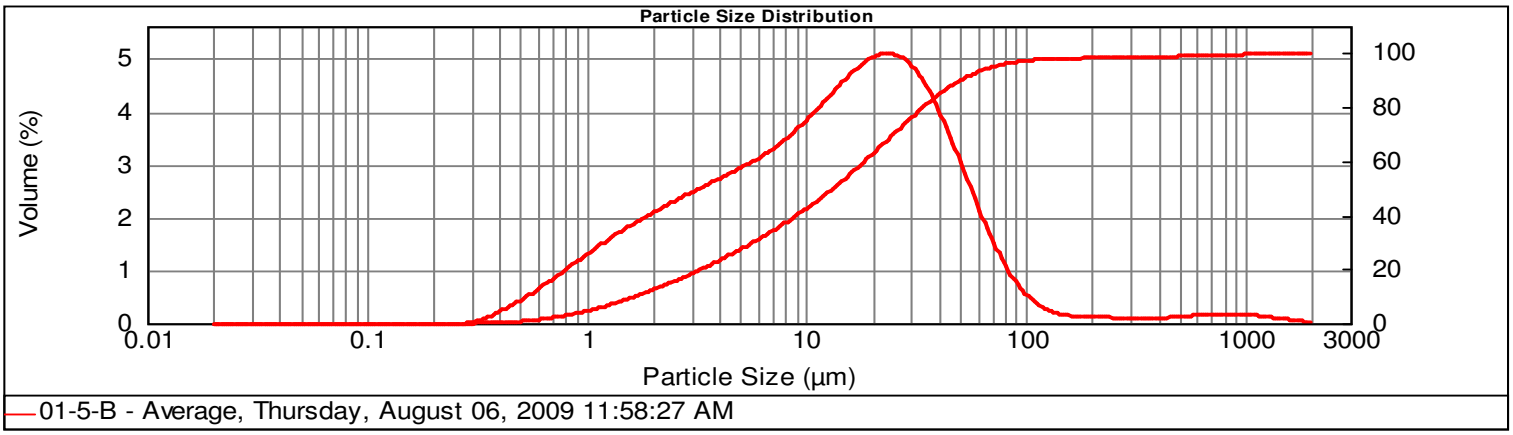
Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 12.27
% Fine Silt (2-3.9 um) = 10.48

d (0.1) : 1.680 **um**
d (0.5) : 13.274 **d (0.9) : 50.497**

Wentworth
% Clay (0-3.9 um) = 22.76
% Silt (3.91-31 um) = 54.37
% Coarse Silt (31 - 62.5 um) = 16.41
% Very Fine sand (62.5 - 125 um) = 4.24
% Fine sand (125-250 um) = .63
% Medium sand (250-500 um) = .45
% Coarse sand (500-1000 um) = .72
% Very Coarse sand (1000 - 2000 um) = .42



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.12	100
-0.5	(1414.21)	0.0	(1000.00)	0.29	99.88
0.0	(1000.00)	0.5	(707.10)	0.39	99.58
0.5	(707.10)	1.0	(500.00)	0.33	99.2
1.0	(500.00)	1.5	(353.55)	0.23	98.86
1.5	(353.55)	2.0	(250.00)	0.22	98.63
2.0	(250.00)	2.5	(176.78)	0.26	98.41
2.5	(176.78)	3.0	(125.00)	0.37	98.15
3.0	(125.00)	3.5	(88.39)	1.09	97.78
3.5	(88.39)	4.0	(62.50)	3.14	96.68
4.0	(62.50)	4.5	(44.19)	6.45	93.54
4.5	(44.19)	5.0	(31.25)	9.71	87.09
5.0	(31.25)	5.5	(22.10)	11.39	77.39
5.5	(22.10)	6.0	(15.63)	11.17	66
6.0	(15.63)	6.5	(11.05)	9.86	54.83
6.5	(11.05)	7.0	(7.81)	8.41	44.97
7.0	(7.81)	7.5	(5.52)	7.29	36.56
7.5	(5.52)	8.0	(3.90)	6.48	29.27
8.0	(3.90)	8.5	(2.76)	5.78	22.79
8.5	(2.76)	9.0	(1.95)	5.05	17.01
9.0	(1.95)	9.5	(1.38)	4.27	11.95
9.5	(1.38)	10.0	(0.98)	3.36	7.69
10.0	(0.98)	10.5	(0.69)	2.36	4.32
10.5	(0.69)	11.0	(0.49)	1.37	1.97
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 12:03:07 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.71

D[4,3] = 25.37um = 5.3phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.67um = 8.55phi

D[v,0.5] = 13.72um = 6.19phi
D[v,0.84] = 40.06um = 4.64phi
D[v,0.95] = 68.19um = 3.87phi

Kurtosis = 127.83
Skewness = 10.22
Standard Deviation = 58.55 um = 4.09phi

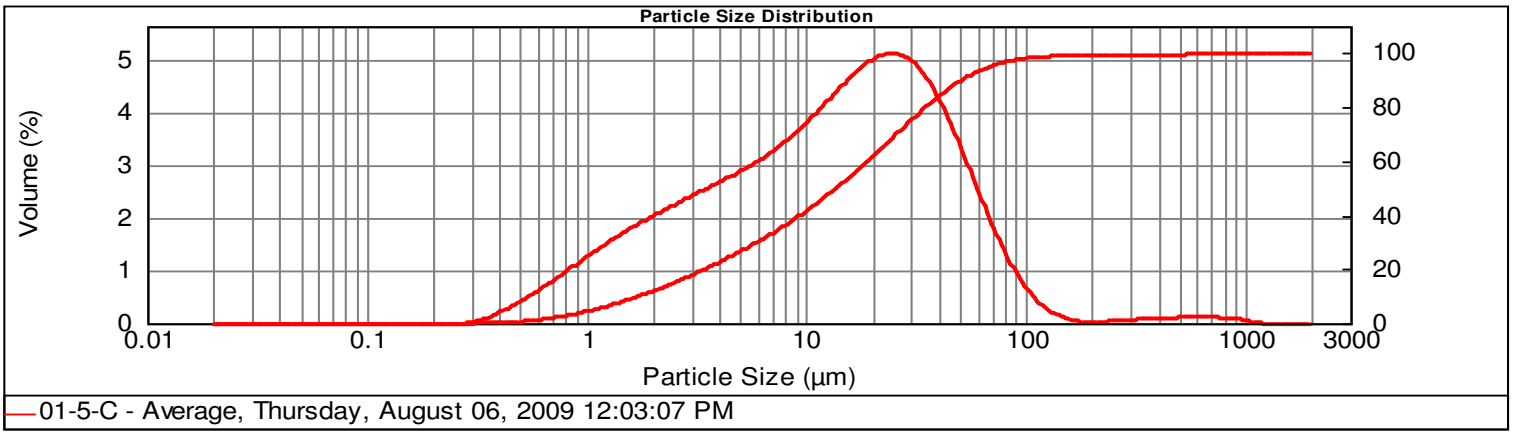
Inclusive SD (Sorting Coeff.) = 1.88 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.46 phi (Silt)

USGS
% Clay (0-2 um) = 11.88
% Fine Silt (2-3.9 um) = 10.25

d (0.1) : 1.727 **um**
d (0.5) : 13.719 **d (0.9) : 51.000**

Wentworth
% Clay (0-3.9 um) = 22.13
% Silt (3.91-31 um) = 54.09
% Coarse Silt (31 - 62.5 um) = 17.55
% Very Fine sand (62.5 - 125 um) = 5.05
% Fine sand (125-250 um) = .33
% Medium sand (250-500 um) = .37
% Coarse sand (500-1000 um) = .46
% Very Coarse sand (1000 - 2000 um) = .02



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.02	100
0.0	(1000.00)	0.5	(707.10)	0.21	99.98
0.5	(707.10)	1.0	(500.00)	0.26	99.77
1.0	(500.00)	1.5	(353.55)	0.23	99.51
1.5	(353.55)	2.0	(250.00)	0.14	99.29
2.0	(250.00)	2.5	(176.78)	0.06	99.15
2.5	(176.78)	3.0	(125.00)	0.27	99.09
3.0	(125.00)	3.5	(88.39)	1.32	98.82
3.5	(88.39)	4.0	(62.50)	3.74	97.5
4.0	(62.50)	4.5	(44.19)	7.13	93.76
4.5	(44.19)	5.0	(31.25)	10.16	86.63
5.0	(31.25)	5.5	(22.10)	11.52	76.47
5.5	(22.10)	6.0	(15.63)	11.11	64.96
6.0	(15.63)	6.5	(11.05)	9.78	53.85
6.5	(11.05)	7.0	(7.81)	8.34	44.07
7.0	(7.81)	7.5	(5.52)	7.21	35.73
7.5	(5.52)	8.0	(3.90)	6.37	28.52
8.0	(3.90)	8.5	(2.76)	5.65	22.15
8.5	(2.76)	9.0	(1.95)	4.93	16.5
9.0	(1.95)	9.5	(1.38)	4.16	11.57
9.5	(1.38)	10.0	(0.98)	3.26	7.41
10.0	(0.98)	10.5	(0.69)	2.28	4.15
10.5	(0.69)	11.0	(0.49)	1.31	1.87
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 12:08:00 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.62

D[4,3] = 24.91um = 5.33phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.66um = 8.56phi

D[v,0.5] = 13.57um = 6.2phi
D[v,0.84] = 38.97um = 4.68phi
D[v,0.95] = 65.55um = 3.93phi

Kurtosis = 144.26
Skewness = 10.93
Standard Deviation = 60.77 um = 4.04phi

Inclusive SD (Sorting Coeff.) = 1.87 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

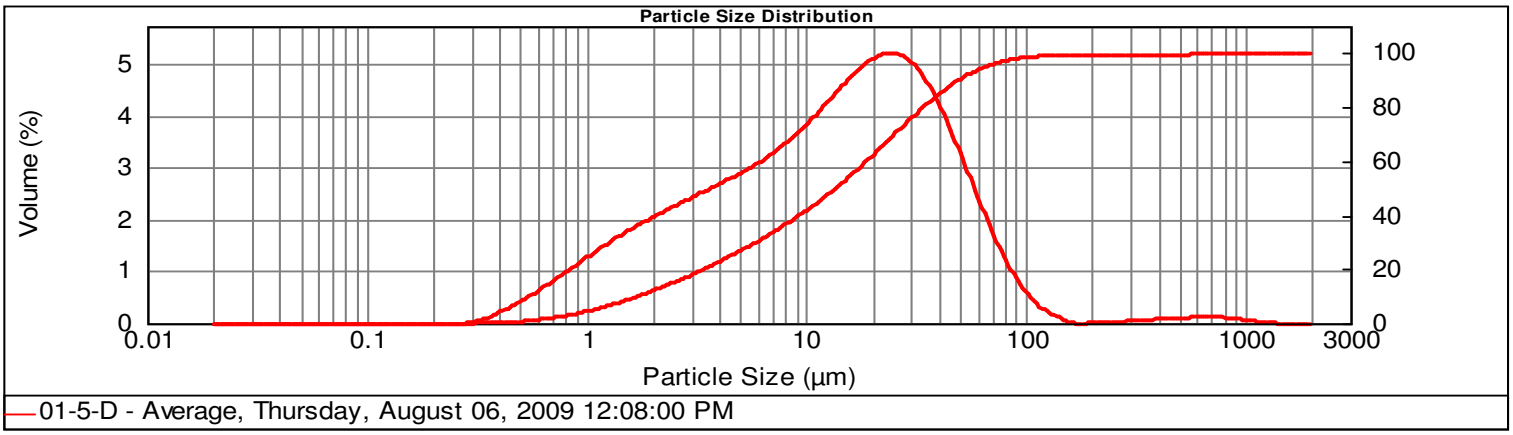
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.48 phi (Silt)

USGS
% Clay (0-2 um) = 11.96
% Fine Silt (2-3.9 um) = 10.29

d (0.1) : 1.718 **um**
d (0.5) : 13.574 **d (0.9) : 49.382**

Wentworth
% Clay (0-3.9 um) = 22.25
% Silt (3.91-31 um) = 54.71
% Coarse Silt (31 - 62.5 um) = 17.37
% Very Fine sand (62.5 - 125 um) = 4.67

% Fine sand (125-250 um) = .2
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = .47
% Very Coarse sand (1000 - 2000 um) = .05



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.05	100
0.0	(1000.00)	0.5	(707.10)	0.22	99.95
0.5	(707.10)	1.0	(500.00)	0.25	99.73
1.0	(500.00)	1.5	(353.55)	0.19	99.48
1.5	(353.55)	2.0	(250.00)	0.09	99.29
2.0	(250.00)	2.5	(176.78)	0.03	99.2
2.5	(176.78)	3.0	(125.00)	0.17	99.17
3.0	(125.00)	3.5	(88.39)	1.17	99
3.5	(88.39)	4.0	(62.50)	3.5	97.83
4.0	(62.50)	4.5	(44.19)	6.95	94.33
4.5	(44.19)	5.0	(31.25)	10.16	87.38
5.0	(31.25)	5.5	(22.10)	11.69	77.22
5.5	(22.10)	6.0	(15.63)	11.32	65.53
6.0	(15.63)	6.5	(11.05)	9.91	54.22
6.5	(11.05)	7.0	(7.81)	8.4	44.31
7.0	(7.81)	7.5	(5.52)	7.24	35.91
7.5	(5.52)	8.0	(3.90)	6.39	28.67
8.0	(3.90)	8.5	(2.76)	5.68	22.28
8.5	(2.76)	9.0	(1.95)	4.96	16.6
9.0	(1.95)	9.5	(1.38)	4.18	11.64
9.5	(1.38)	10.0	(0.98)	3.29	7.46
10.0	(0.98)	10.5	(0.69)	2.29	4.18
10.5	(0.69)	11.0	(0.49)	1.32	1.88
11.0	(0.49)	11.5	(0.35)	0.52	0.56
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 12:12:45 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.88

D[4,3] = 25.41um = 5.3phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.6um = 8.59phi

D[v,0.5] = 13.06um = 6.26phi
D[v,0.84] = 37.99um = 4.72phi
D[v,0.95] = 65.3um = 3.94phi

Kurtosis = 127.31
Skewness = 10.34
Standard Deviation = 65.81 um = 3.93phi

Inclusive SD (Sorting Coeff.) = 1.87 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

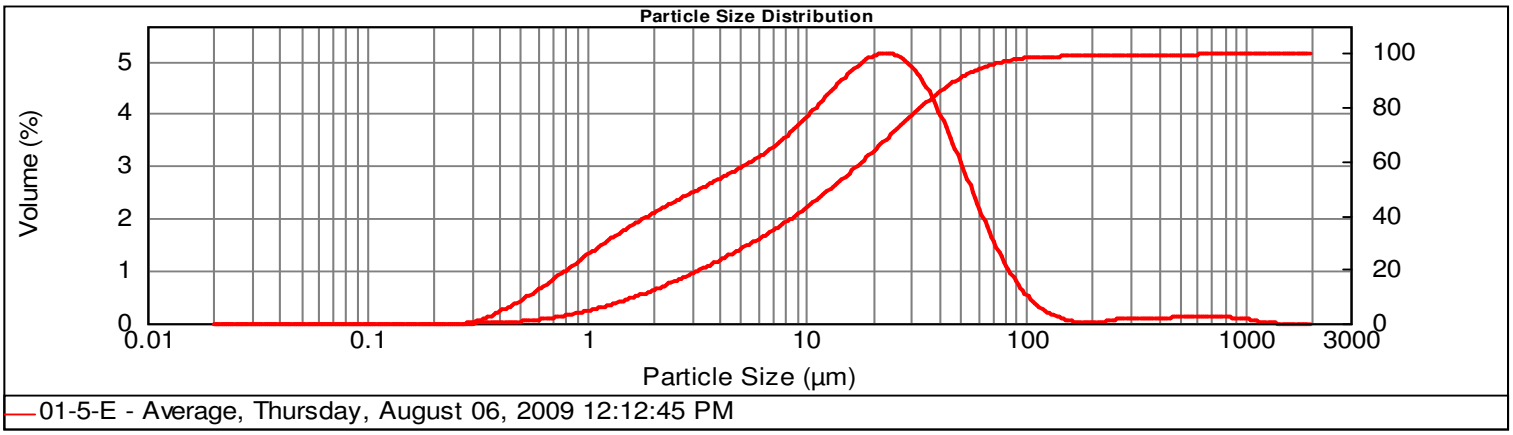
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.52 phi (Silt)

USGS
% Clay (0-2 um) = 12.22
% Fine Silt (2-3.9 um) = 10.53

d (0.1) : 1.689 **um**
d (0.5) : 13.058 **d (0.9) : 48.473**

Wentworth
% Clay (0-3.9 um) = 22.74
% Silt (3.91-31 um) = 55.19
% Coarse Silt (31 - 62.5 um) = 16.49
% Very Fine sand (62.5 - 125 um) = 4.29

% Fine sand (125-250 um) = .27
% Medium sand (250-500 um) = .42
% Coarse sand (500-1000 um) = .52
% Very Coarse sand (1000 - 2000 um) = .07



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.07	100
0.0	(1000.00)	0.5	(707.10)	0.25	99.93
0.5	(707.10)	1.0	(500.00)	0.27	99.68
1.0	(500.00)	1.5	(353.55)	0.23	99.41
1.5	(353.55)	2.0	(250.00)	0.19	99.18
2.0	(250.00)	2.5	(176.78)	0.07	98.99
2.5	(176.78)	3.0	(125.00)	0.21	98.92
3.0	(125.00)	3.5	(88.39)	1.07	98.72
3.5	(88.39)	4.0	(62.50)	3.22	97.65
4.0	(62.50)	4.5	(44.19)	6.51	94.43
4.5	(44.19)	5.0	(31.25)	9.73	87.92
5.0	(31.25)	5.5	(22.10)	11.45	78.19
5.5	(22.10)	6.0	(15.63)	11.33	66.73
6.0	(15.63)	6.5	(11.05)	10.08	55.4
6.5	(11.05)	7.0	(7.81)	8.6	45.33
7.0	(7.81)	7.5	(5.52)	7.41	36.72
7.5	(5.52)	8.0	(3.90)	6.54	29.31
8.0	(3.90)	8.5	(2.76)	5.81	22.77
8.5	(2.76)	9.0	(1.95)	5.07	16.96
9.0	(1.95)	9.5	(1.38)	4.27	11.89
9.5	(1.38)	10.0	(0.98)	3.35	7.63
10.0	(0.98)	10.5	(0.69)	2.34	4.28
10.5	(0.69)	11.0	(0.49)	1.35	1.94
11.0	(0.49)	11.5	(0.35)	0.54	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 12:29:40 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.73

D[4,3] = 27.68um = 5.17phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.3um = 8.77phi

D[v,0.5] = 11.32um = 6.46phi
D[v,0.84] = 34.48um = 4.86phi
D[v,0.95] = 58.3um = 4.1phi

Kurtosis = 109.89
Skewness = 9.86
Standard Deviation = 98.49 um = 3.34phi

Inclusive SD (Sorting Coeff.) = 1.87 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

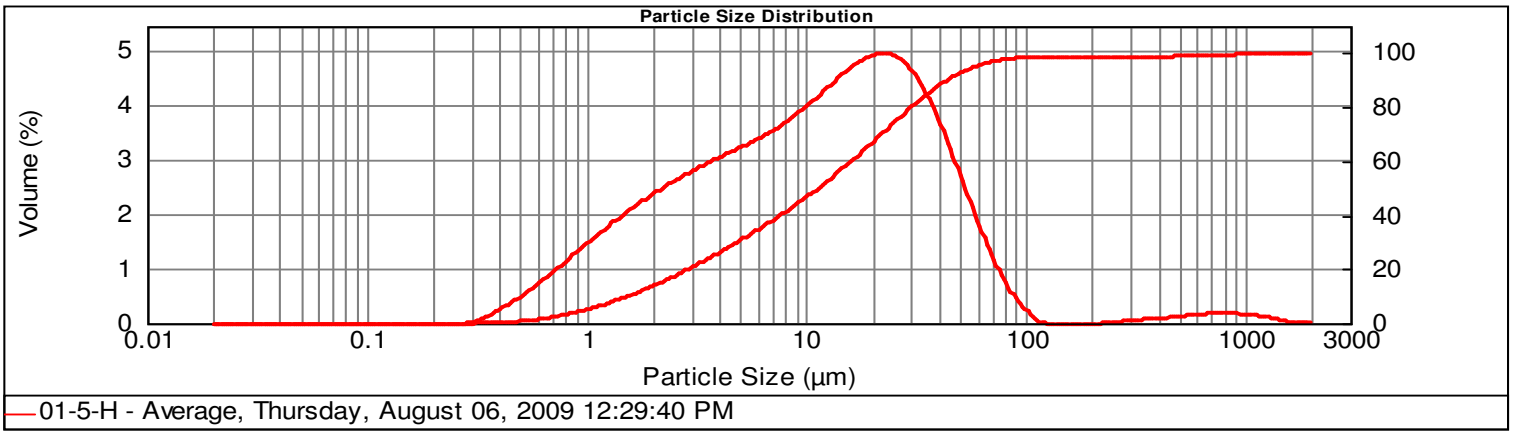
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.7 phi (Silt)

USGS
% Clay (0-2 um) = 13.79
% Fine Silt (2-3.9 um) = 11.79

d (0.1) : 1.538 **um**
d (0.5) : 11.320 **d (0.9) : 43.809**

Wentworth
% Clay (0-3.9 um) = 25.58
% Silt (3.91-31 um) = 55.33
% Coarse Silt (31 - 62.5 um) = 14.92
% Very Fine sand (62.5 - 125 um) = 2.75

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .32
% Coarse sand (500-1000 um) = .75
% Very Coarse sand (1000 - 2000 um) = .33



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.05	100
-0.5	(1414.21)	0.0	(1000.00)	0.28	99.95
0.0	(1000.00)	0.5	(707.10)	0.4	99.67
0.5	(707.10)	1.0	(500.00)	0.35	99.26
1.0	(500.00)	1.5	(353.55)	0.22	98.91
1.5	(353.55)	2.0	(250.00)	0.1	98.69
2.0	(250.00)	2.5	(176.78)	0	98.59
2.5	(176.78)	3.0	(125.00)	0	98.59
3.0	(125.00)	3.5	(88.39)	0.4	98.59
3.5	(88.39)	4.0	(62.50)	2.34	98.18
4.0	(62.50)	4.5	(44.19)	5.65	95.84
4.5	(44.19)	5.0	(31.25)	9.04	90.19
5.0	(31.25)	5.5	(22.10)	10.92	81.16
5.5	(22.10)	6.0	(15.63)	10.95	70.23
6.0	(15.63)	6.5	(11.05)	9.93	59.28
6.5	(11.05)	7.0	(7.81)	8.75	49.34
7.0	(7.81)	7.5	(5.52)	7.83	40.59
7.5	(5.52)	8.0	(3.90)	7.14	32.76
8.0	(3.90)	8.5	(2.76)	6.48	25.61
8.5	(2.76)	9.0	(1.95)	5.71	19.14
9.0	(1.95)	9.5	(1.38)	4.82	13.43
9.5	(1.38)	10.0	(0.98)	3.78	8.6
10.0	(0.98)	10.5	(0.69)	2.63	4.82
10.5	(0.69)	11.0	(0.49)	1.52	2.19
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:22:41 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.84

D[4,3] = 32.74um = 4.93phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.74um = 8.51phi

D[v,0.5] = 14.92um = 6.07phi
D[v,0.84] = 42.1um = 4.57phi
D[v,0.95] = 74.04um = 3.76phi

Kurtosis = 110.21
Skewness = 9.72
Standard Deviation = 101.98 um = 3.29phi

Inclusive SD (Sorting Coeff.) = 1.91 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

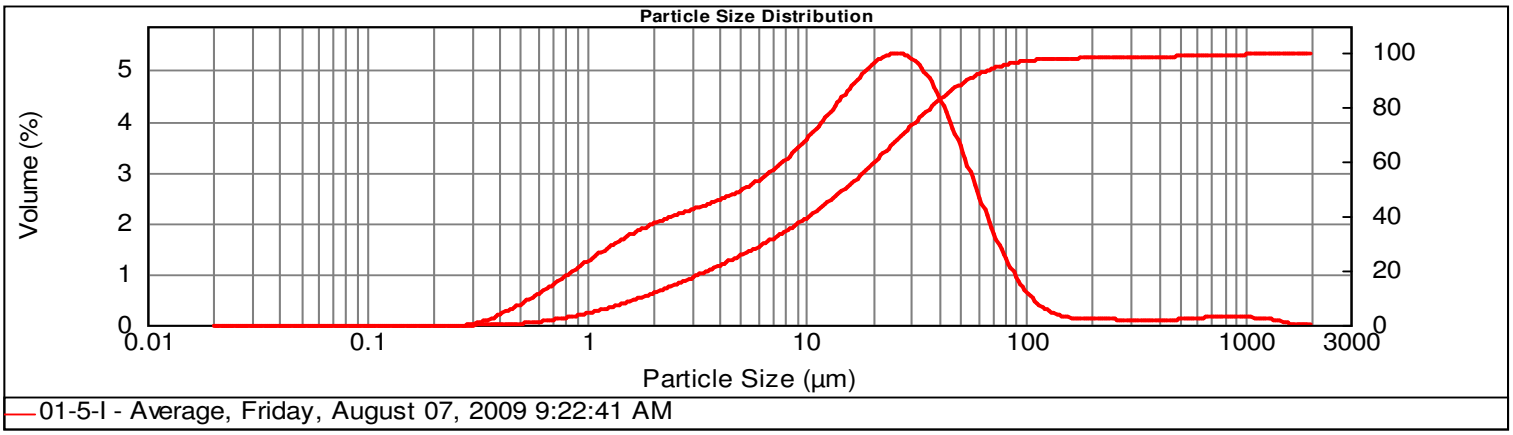
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 11.71
% Fine Silt (2-3.9 um) = 9.65

d (0.1) : 1.746 **um**
d (0.5) : 14.918 **d (0.9) : 53.747**

Wentworth
% Clay (0-3.9 um) = 21.36
% Silt (3.91-31 um) = 53
% Coarse Silt (31 - 62.5 um) = 18.4
% Very Fine sand (62.5 - 125 um) = 5.08

% Fine sand (125-250 um) = .68
% Medium sand (250-500 um) = .45
% Coarse sand (500-1000 um) = .68
% Very Coarse sand (1000 - 2000 um) = .36



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.07	100
-0.5	(1414.21)	0.0	(1000.00)	0.29	99.93
0.0	(1000.00)	0.5	(707.10)	0.37	99.64
0.5	(707.10)	1.0	(500.00)	0.31	99.26
1.0	(500.00)	1.5	(353.55)	0.22	98.96
1.5	(353.55)	2.0	(250.00)	0.23	98.74
2.0	(250.00)	2.5	(176.78)	0.27	98.51
2.5	(176.78)	3.0	(125.00)	0.41	98.24
3.0	(125.00)	3.5	(88.39)	1.32	97.83
3.5	(88.39)	4.0	(62.50)	3.75	96.51
4.0	(62.50)	4.5	(44.19)	7.42	92.76
4.5	(44.19)	5.0	(31.25)	10.7	85.33
5.0	(31.25)	5.5	(22.10)	11.99	74.63
5.5	(22.10)	6.0	(15.63)	11.25	62.64
6.0	(15.63)	6.5	(11.05)	9.58	51.38
6.5	(11.05)	7.0	(7.81)	7.93	41.81
7.0	(7.81)	7.5	(5.52)	6.67	33.88
7.5	(5.52)	8.0	(3.90)	5.82	27.2

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.25	21.39
8.5	(2.76)	9.0	(1.95)	4.74	16.14
9.0	(1.95)	9.5	(1.38)	4.08	11.4
9.5	(1.38)	10.0	(0.98)	3.23	7.32
10.0	(0.98)	10.5	(0.69)	2.24	4.09
10.5	(0.69)	11.0	(0.49)	1.29	1.85
11.0	(0.49)	11.5	(0.35)	0.51	0.55
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-J - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:29:44 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.10

D[4,3] = 35.05um = 4.83phi
D[v,0.05] = 1.09um = 9.83phi
D[v,0.16] = 2.78um = 8.49phi

D[v,0.5] = 15.26um = 6.03phi
D[v,0.84] = 44.2um = 4.5phi
D[v,0.95] = 81.16um = 3.62phi

Kurtosis = 97.11
Skewness = 8.66
Standard Deviation = 97.54 um = 3.36phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .93 phi (Mesokurtic)

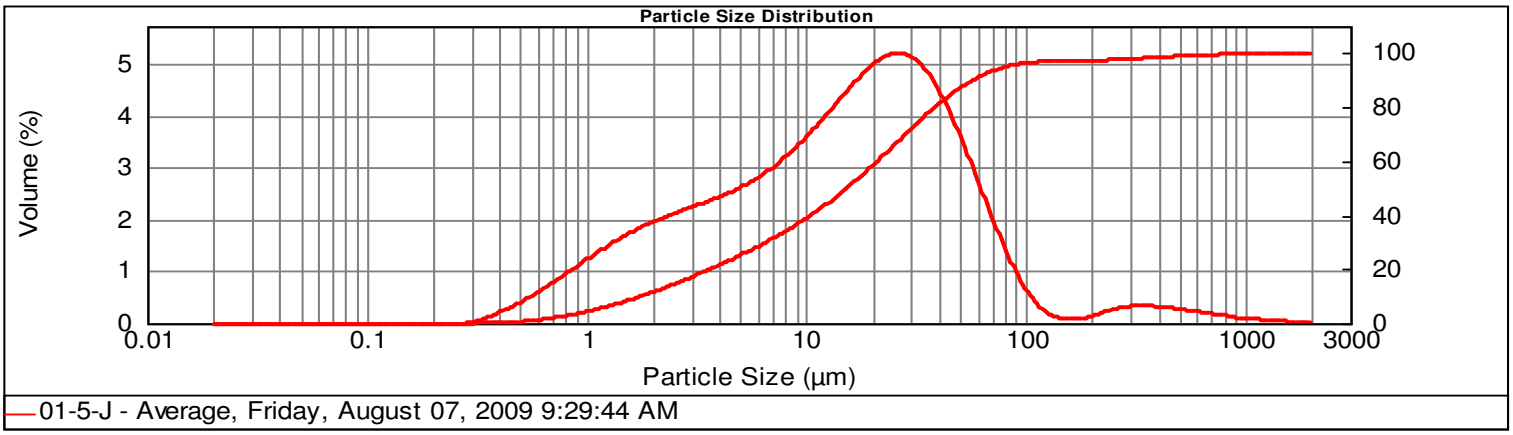
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 11.54
% Fine Silt (2-3.9 um) = 9.54

d (0.1) : 1.766 **um**
d (0.5) : 15.260 **d (0.9) : 57.049**

Wentworth
% Clay (0-3.9 um) = 21.08
% Silt (3.91-31 um) = 52.02
% Coarse Silt (31 - 62.5 um) = 18.56
% Very Fine sand (62.5 - 125 um) = 5.27

% Fine sand (125-250 um) = .63
% Medium sand (250-500 um) = 1.42
% Coarse sand (500-1000 um) = .81
% Very Coarse sand (1000 - 2000 um) = .22



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.16	99.94
0.0	(1000.00)	0.5	(707.10)	0.3	99.78
0.5	(707.10)	1.0	(500.00)	0.51	99.48
1.0	(500.00)	1.5	(353.55)	0.7	98.97
1.5	(353.55)	2.0	(250.00)	0.72	98.27
2.0	(250.00)	2.5	(176.78)	0.39	97.55
2.5	(176.78)	3.0	(125.00)	0.24	97.16
3.0	(125.00)	3.5	(88.39)	1.25	96.93
3.5	(88.39)	4.0	(62.50)	4.01	95.67
4.0	(62.50)	4.5	(44.19)	7.66	91.66
4.5	(44.19)	5.0	(31.25)	10.63	84
5.0	(31.25)	5.5	(22.10)	11.7	73.37
5.5	(22.10)	6.0	(15.63)	10.97	61.67
6.0	(15.63)	6.5	(11.05)	9.4	50.69
6.5	(11.05)	7.0	(7.81)	7.82	41.3
7.0	(7.81)	7.5	(5.52)	6.6	33.47
7.5	(5.52)	8.0	(3.90)	5.76	26.87
8.0	(3.90)	8.5	(2.76)	5.2	21.11
8.5	(2.76)	9.0	(1.95)	4.67	15.91
9.0	(1.95)	9.5	(1.38)	4.01	11.24
9.5	(1.38)	10.0	(0.98)	3.17	7.23
10.0	(0.98)	10.5	(0.69)	2.21	4.05
10.5	(0.69)	11.0	(0.49)	1.28	1.84
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 01-5-K - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:34:06 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.68

D[4,3] = 44.5um = 4.49phi
D[v,0.05] = 1.09um = 9.85phi
D[v,0.16] = 2.74um = 8.51phi

D[v,0.5] = 14.94um = 6.06phi
D[v,0.84] = 42.17um = 4.57phi
D[v,0.95] = 77.67um = 3.69phi

Kurtosis = 58.48
Skewness = 7.2
Standard Deviation = 151.24 um = 2.73phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

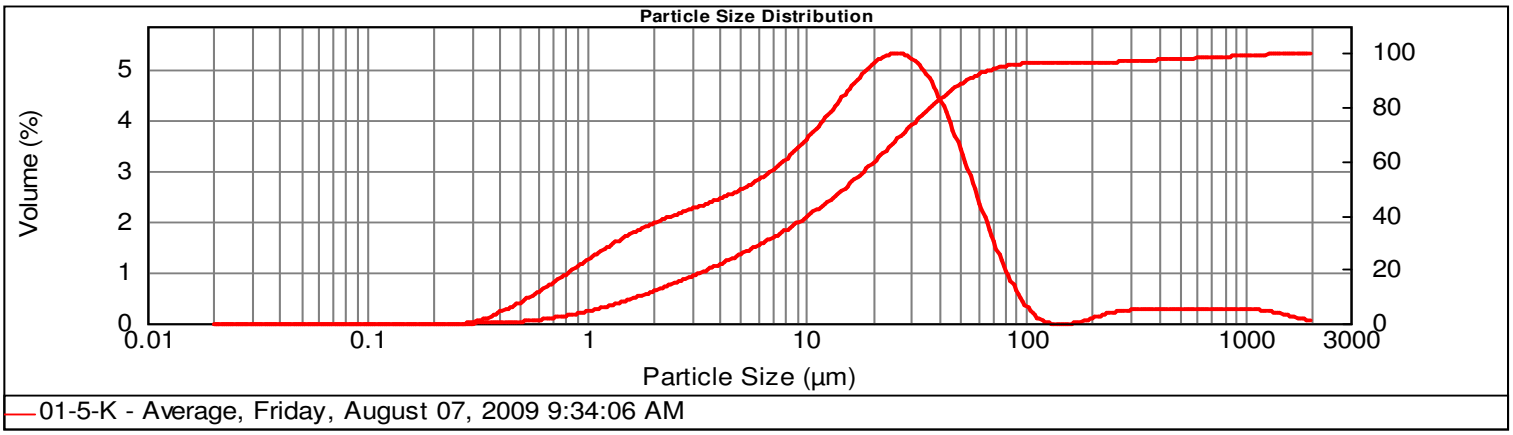
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 11.7
% Fine Silt (2-3.9 um) = 9.63

d (0.1) : 1.746 **um**
d (0.5) : 14.942 **d (0.9) : 54.050**

Wentworth
% Clay (0-3.9 um) = 21.33
% Silt (3.91-31 um) = 52.99
% Coarse Silt (31 - 62.5 um) = 18.22
% Very Fine sand (62.5 - 125 um) = 3.88

% Fine sand (125-250 um) = .28
% Medium sand (250-500 um) = 1.17
% Coarse sand (500-1000 um) = 1.28
% Very Coarse sand (1000 - 2000 um) = .84



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.28	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.72
0.0	(1000.00)	0.5	(707.10)	0.67	99.16
0.5	(707.10)	1.0	(500.00)	0.62	98.5
1.0	(500.00)	1.5	(353.55)	0.6	97.88
1.5	(353.55)	2.0	(250.00)	0.58	97.28
2.0	(250.00)	2.5	(176.78)	0.29	96.71
2.5	(176.78)	3.0	(125.00)	0	96.42
3.0	(125.00)	3.5	(88.39)	0.61	96.42
3.5	(88.39)	4.0	(62.50)	3.27	95.81
4.0	(62.50)	4.5	(44.19)	7.25	92.54
4.5	(44.19)	5.0	(31.25)	10.69	85.28
5.0	(31.25)	5.5	(22.10)	12.01	74.59
5.5	(22.10)	6.0	(15.63)	11.25	62.58
6.0	(15.63)	6.5	(11.05)	9.56	51.33
6.5	(11.05)	7.0	(7.81)	7.92	41.77
7.0	(7.81)	7.5	(5.52)	6.67	33.85
7.5	(5.52)	8.0	(3.90)	5.82	27.18
8.0	(3.90)	8.5	(2.76)	5.24	21.35
8.5	(2.76)	9.0	(1.95)	4.71	16.11
9.0	(1.95)	9.5	(1.38)	4.06	11.4
9.5	(1.38)	10.0	(0.98)	3.22	7.34
10.0	(0.98)	10.5	(0.69)	2.25	4.12
10.5	(0.69)	11.0	(0.49)	1.3	1.87
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Monday, August 03, 2009 10:28:28 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 5.13

D[4,3] = 20.01um = 5.64phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 12.93um = 6.27phi
D[v,0.84] = 38.2um = 4.71phi
D[v,0.95] = 63.36um = 3.98phi

Kurtosis = 4.06
Skewness = 1.83
Standard Deviation = 21.21 um = 5.56phi

Inclusive SD (Sorting Coeff.) = 1.88 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

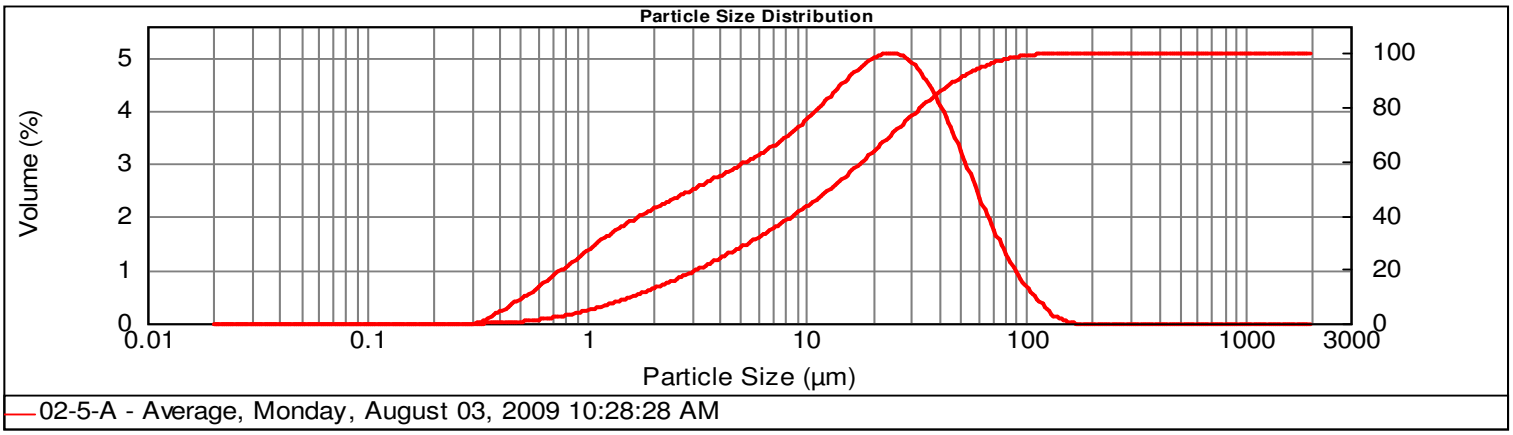
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.54 phi (Silt)

USGS
% Clay (0-2 um) = 12.71
% Fine Silt (2-3.9 um) = 10.65

d (0.1) : 1.633 **um**
d (0.5) : 12.932 **d (0.9) : 48.348**

Wentworth
% Clay (0-3.9 um) = 23.36
% Silt (3.91-31 um) = 54.33
% Coarse Silt (31 - 62.5 um) = 17.11
% Very Fine sand (62.5 - 125 um) = 5.05

% Fine sand (125-250 um) = .16
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.16	100
3.0	(125.00)	3.5	(88.39)	1.38	99.84
3.5	(88.39)	4.0	(62.50)	3.67	98.47
4.0	(62.50)	4.5	(44.19)	6.91	94.8
4.5	(44.19)	5.0	(31.25)	9.94	87.88
5.0	(31.25)	5.5	(22.10)	11.39	77.94
5.5	(22.10)	6.0	(15.63)	11.05	66.56
6.0	(15.63)	6.5	(11.05)	9.76	55.51
6.5	(11.05)	7.0	(7.81)	8.41	45.74
7.0	(7.81)	7.5	(5.52)	7.37	37.33
7.5	(5.52)	8.0	(3.90)	6.57	29.96
8.0	(3.90)	8.5	(2.76)	5.85	23.39
8.5	(2.76)	9.0	(1.95)	5.16	17.53
9.0	(1.95)	9.5	(1.38)	4.41	12.38
9.5	(1.38)	10.0	(0.98)	3.52	7.97
10.0	(0.98)	10.5	(0.69)	2.47	4.45
10.5	(0.69)	11.0	(0.49)	1.43	1.98
11.0	(0.49)	11.5	(0.35)	0.54	0.55
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-A (2)
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 1:38:38 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.58

D[4,3] = 39.7um = 4.65phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.53um = 8.63phi

D[v,0.5] = 13.72um = 6.19phi
D[v,0.84] = 44.24um = 4.5phi
D[v,0.95] = 89.88um = 3.48phi

Kurtosis = 77
Skewness = 8.25
Standard Deviation = 135.16 um = 2.89phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

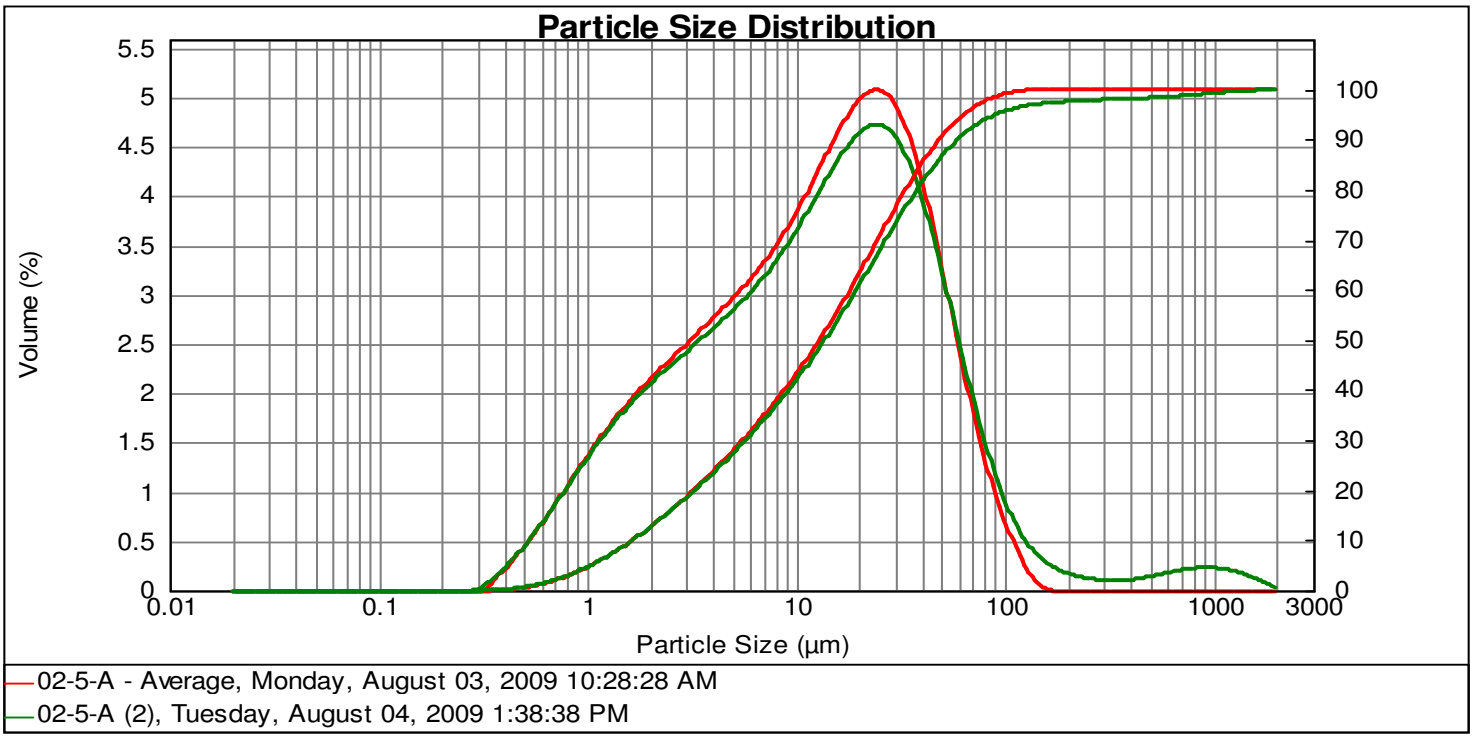
Inclusive Skewness = -0.17 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 12.64
% Fine Silt (2-3.9 um) = 10.34

d (0.1) : 1.635 um
d (0.5) : 13.718
d (0.9) : 59.285

Wentworth
% Clay (0-3.9 um) = 22.98
% Silt (3.91-31 um) = 51.32
% Coarse Silt (31 - 62.5 um) = 16.55
% Very Fine sand (62.5 - 125 um) = 5.88

% Fine sand (125-250 um) = 1.14
% Medium sand (250-500 um) = .51
% Coarse sand (500-1000 um) = .92
% Very Coarse sand (1000 - 2000 um) = .69



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.23	100
-0.5	(1414.21)	0.0	(1000.00)	0.47	99.77
0.0	(1000.00)	0.5	(707.10)	0.52	99.31
0.5	(707.10)	1.0	(500.00)	0.41	98.79
1.0	(500.00)	1.5	(353.55)	0.27	98.38
1.5	(353.55)	2.0	(250.00)	0.24	98.11
2.0	(250.00)	2.5	(176.78)	0.37	97.87
2.5	(176.78)	3.0	(125.00)	0.77	97.5
3.0	(125.00)	3.5	(88.39)	1.87	96.73
3.5	(88.39)	4.0	(62.50)	4.01	94.87
4.0	(62.50)	4.5	(44.19)	6.88	90.86
4.5	(44.19)	5.0	(31.25)	9.43	83.97
5.0	(31.25)	5.5	(22.10)	10.61	74.54
5.5	(22.10)	6.0	(15.63)	10.32	63.93
6.0	(15.63)	6.5	(11.05)	9.22	53.61
6.5	(11.05)	7.0	(7.81)	8.02	44.39
7.0	(7.81)	7.5	(5.52)	7.05	36.37
7.5	(5.52)	8.0	(3.90)	6.31	29.32
8.0	(3.90)	8.5	(2.76)	5.66	23.01
8.5	(2.76)	9.0	(1.95)	5.03	17.35
9.0	(1.95)	9.5	(1.38)	4.33	12.32
9.5	(1.38)	10.0	(0.98)	3.47	7.99
10.0	(0.98)	10.5	(0.69)	2.45	4.52
10.5	(0.69)	11.0	(0.49)	1.44	2.06
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Monday, August 03, 2009 10:36:12 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 5.67

D[4,3] = 21.42um = 5.55phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 13.24um = 6.24phi
D[v,0.84] = 39.62um = 4.66phi
D[v,0.95] = 69.62um = 3.84phi

Kurtosis = 7.49
Skewness = 2.35
Standard Deviation = 24.63 um = 5.34phi

Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

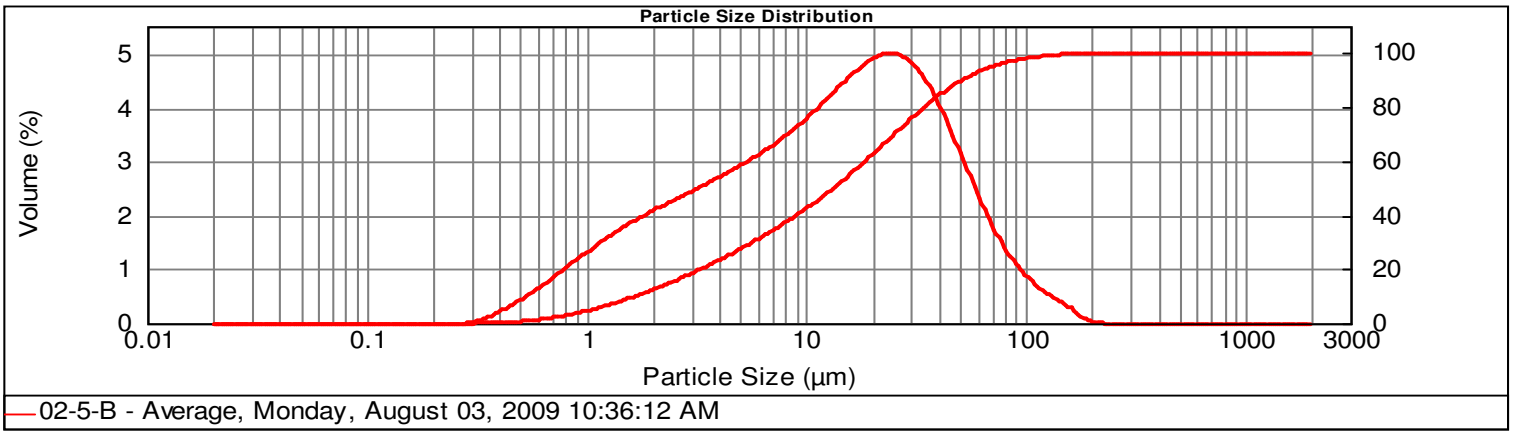
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 12.41
% Fine Silt (2-3.9 um) = 10.44

d (0.1) : 1.665 **um**
d (0.5) : 13.242 **d (0.9) : 50.984**

Wentworth
% Clay (0-3.9 um) = 22.86
% Silt (3.91-31 um) = 53.92
% Coarse Silt (31 - 62.5 um) = 16.79
% Very Fine sand (62.5 - 125 um) = 5.57

% Fine sand (125-250 um) = .87
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0.06	100
2.5	(176.78)	3.0	(125.00)	0.81	99.94
3.0	(125.00)	3.5	(88.39)	1.85	99.13
3.5	(88.39)	4.0	(62.50)	3.73	97.29
4.0	(62.50)	4.5	(44.19)	6.75	93.56
4.5	(44.19)	5.0	(31.25)	9.79	86.81
5.0	(31.25)	5.5	(22.10)	11.27	77.02
5.5	(22.10)	6.0	(15.63)	10.95	65.75
6.0	(15.63)	6.5	(11.05)	9.7	54.8
6.5	(11.05)	7.0	(7.81)	8.39	45.1
7.0	(7.81)	7.5	(5.52)	7.34	36.71
7.5	(5.52)	8.0	(3.90)	6.49	29.37

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.75	22.88
8.5	(2.76)	9.0	(1.95)	5.05	17.14
9.0	(1.95)	9.5	(1.38)	4.31	12.09
9.5	(1.38)	10.0	(0.98)	3.42	7.78
10.0	(0.98)	10.5	(0.69)	2.4	4.36
10.5	(0.69)	11.0	(0.49)	1.38	1.96
11.0	(0.49)	11.5	(0.35)	0.54	0.58
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-B (2) - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 1:45:08 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 30.59

D[4,3] = 67.92um = 3.88phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 14.35um = 6.12phi
D[v,0.84] = 49.82um = 4.33phi
D[v,0.95] = 323.97um = 1.63phi

Kurtosis = 28.13
Skewness = 5.13
Standard Deviation = 216.16 um = 2.21phi

Inclusive SD (Sorting Coeff.) = 2.35 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.16 phi (Leptokurtic)

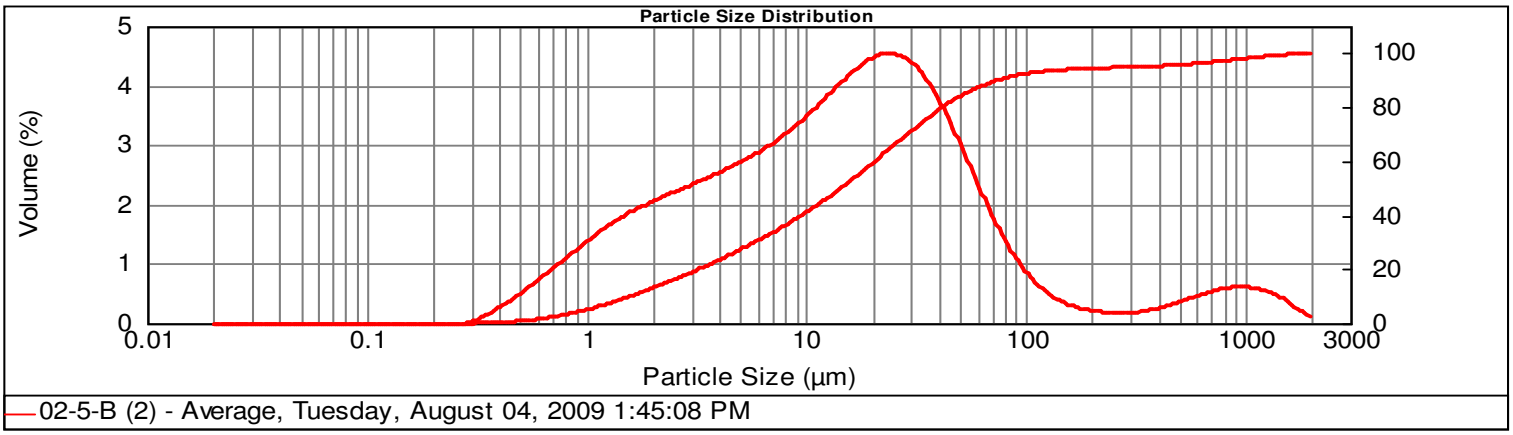
Inclusive Skewness = -0.05 (Near Symmetrical)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.97
% Fine Silt (2-3.9 um) = 9.99

d (0.1) : 1.588 **um**
d (0.5) : 14.350 **d (0.9) : 73.807**

Wentworth
% Clay (0-3.9 um) = 22.96
% Silt (3.91-31 um) = 49.27
% Coarse Silt (31 - 62.5 um) = 15.67
% Very Fine sand (62.5 - 125 um) = 5.52

% Fine sand (125-250 um) = 1.28
% Medium sand (250-500 um) = 1.03
% Coarse sand (500-1000 um) = 2.37
% Very Coarse sand (1000 - 2000 um) = 1.9



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.64	100
-0.5	(1414.21)	0.0	(1000.00)	1.25	99.36
0.0	(1000.00)	0.5	(707.10)	1.34	98.1
0.5	(707.10)	1.0	(500.00)	1.02	96.76
1.0	(500.00)	1.5	(353.55)	0.62	95.74
1.5	(353.55)	2.0	(250.00)	0.41	95.11
2.0	(250.00)	2.5	(176.78)	0.46	94.7
2.5	(176.78)	3.0	(125.00)	0.81	94.24
3.0	(125.00)	3.5	(88.39)	1.79	93.42
3.5	(88.39)	4.0	(62.50)	3.73	91.64
4.0	(62.50)	4.5	(44.19)	6.46	87.9
4.5	(44.19)	5.0	(31.25)	8.98	81.44
5.0	(31.25)	5.5	(22.10)	10.21	72.46
5.5	(22.10)	6.0	(15.63)	9.96	62.25
6.0	(15.63)	6.5	(11.05)	8.87	52.29
6.5	(11.05)	7.0	(7.81)	7.68	43.42
7.0	(7.81)	7.5	(5.52)	6.73	35.74
7.5	(5.52)	8.0	(3.90)	6.02	29.01
8.0	(3.90)	8.5	(2.76)	5.44	22.99
8.5	(2.76)	9.0	(1.95)	4.9	17.55
9.0	(1.95)	9.5	(1.38)	4.3	12.65
9.5	(1.38)	10.0	(0.98)	3.53	8.35
10.0	(0.98)	10.5	(0.69)	2.56	4.82
10.5	(0.69)	11.0	(0.49)	1.54	2.26
11.0	(0.49)	11.5	(0.35)	0.65	0.73
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 1:58:32 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.06

D[4,3] = 59.75um = 4.06phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.61um = 8.58phi

D[v,0.5] = 14.53um = 6.1phi
D[v,0.84] = 50.68um = 4.3phi
D[v,0.95] = 162.81um = 2.62phi

Kurtosis = 36.29
Skewness = 5.78
Standard Deviation = 194.08 um = 2.37phi

Inclusive SD (Sorting Coeff.) = 2.18 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.02 phi (Mesokurtic)

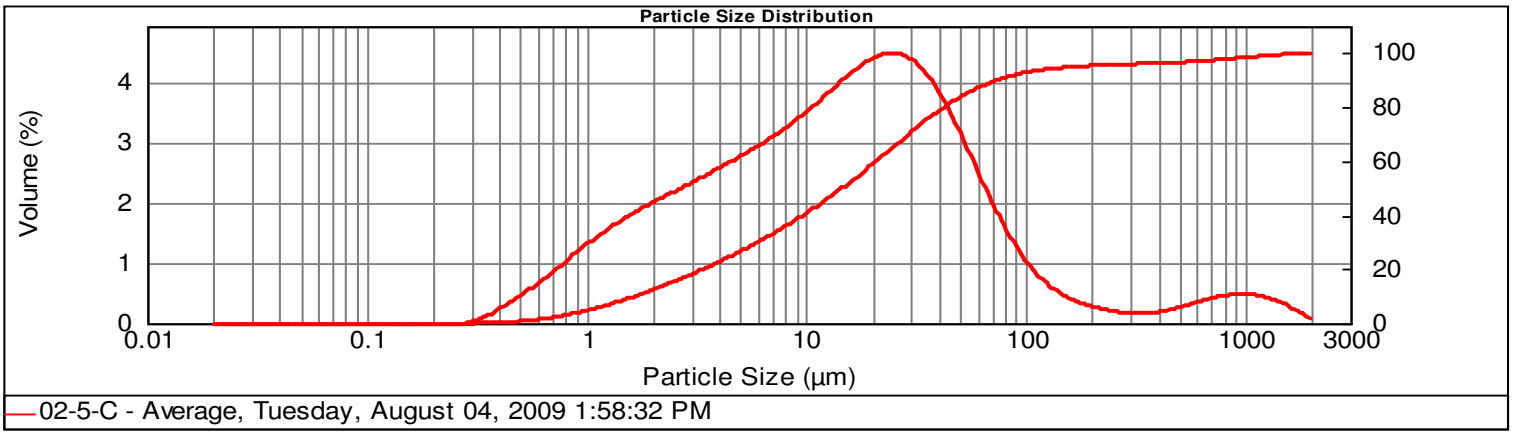
Inclusive Skewness = -0.1 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.32
% Fine Silt (2-3.9 um) = 9.97

d (0.1) : 1.665 **um**
d (0.5) : 14.529 **d (0.9) : 73.165**

Wentworth
% Clay (0-3.9 um) = 22.29
% Silt (3.91-31 um) = 49.36
% Coarse Silt (31 - 62.5 um) = 16.15
% Very Fine sand (62.5 - 125 um) = 6.32

% Fine sand (125-250 um) = 1.67
% Medium sand (250-500 um) = .86
% Coarse sand (500-1000 um) = 1.83
% Very Coarse sand (1000 - 2000 um) = 1.52



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.52	100
-0.5	(1414.21)	0.0	(1000.00)	1	99.48
0.0	(1000.00)	0.5	(707.10)	1.06	98.48
0.5	(707.10)	1.0	(500.00)	0.78	97.43
1.0	(500.00)	1.5	(353.55)	0.47	96.65
1.5	(353.55)	2.0	(250.00)	0.39	96.18
2.0	(250.00)	2.5	(176.78)	0.6	95.79
2.5	(176.78)	3.0	(125.00)	1.07	95.2
3.0	(125.00)	3.5	(88.39)	2.16	94.12
3.5	(88.39)	4.0	(62.50)	4.16	91.96
4.0	(62.50)	4.5	(44.19)	6.81	87.8
4.5	(44.19)	5.0	(31.25)	9.11	80.99
5.0	(31.25)	5.5	(22.10)	10.12	71.88
5.5	(22.10)	6.0	(15.63)	9.81	61.76
6.0	(15.63)	6.5	(11.05)	8.83	51.94
6.5	(11.05)	7.0	(7.81)	7.77	43.12
7.0	(7.81)	7.5	(5.52)	6.89	35.35
7.5	(5.52)	8.0	(3.90)	6.15	28.46
8.0	(3.90)	8.5	(2.76)	5.47	22.31
8.5	(2.76)	9.0	(1.95)	4.83	16.84
9.0	(1.95)	9.5	(1.38)	4.16	12.01
9.5	(1.38)	10.0	(0.98)	3.36	7.84
10.0	(0.98)	10.5	(0.69)	2.4	4.49
10.5	(0.69)	11.0	(0.49)	1.43	2.08
11.0	(0.49)	11.5	(0.35)	0.59	0.65
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 1:53:06 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 27.91

D[4,3] = 61.2um = 4.03phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.61um = 8.58phi

D[v,0.5] = 14.86um = 6.07phi
D[v,0.84] = 48.69um = 4.36phi
D[v,0.95] = 149.51um = 2.74phi

Kurtosis = 34.12
Skewness = 5.66
Standard Deviation = 202.8 um = 2.3phi

Inclusive SD (Sorting Coeff.) = 2.14 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.02 phi (Mesokurtic)

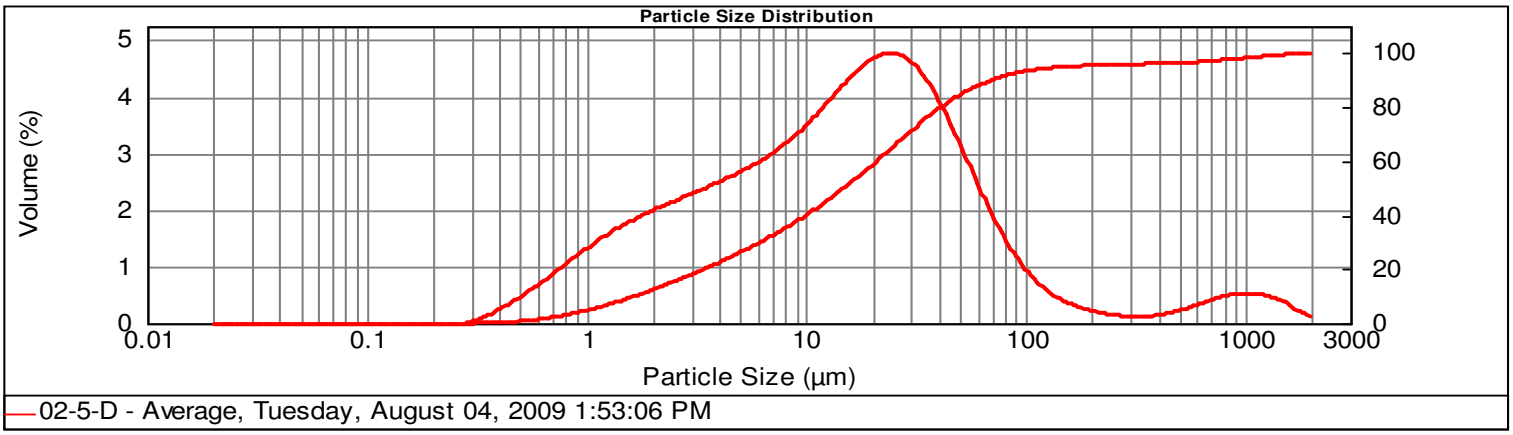
Inclusive Skewness = -0.13 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 12.38
% Fine Silt (2-3.9 um) = 9.74

d (0.1) : 1.654 **um**
d (0.5) : 14.857 **d (0.9) : 69.343**

Wentworth
% Clay (0-3.9 um) = 22.13
% Silt (3.91-31 um) = 50.07
% Coarse Silt (31 - 62.5 um) = 16.35
% Very Fine sand (62.5 - 125 um) = 5.9

% Fine sand (125-250 um) = 1.37
% Medium sand (250-500 um) = .64
% Coarse sand (500-1000 um) = 1.83
% Very Coarse sand (1000 - 2000 um) = 1.71



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.59	100
-0.5	(1414.21)	0.0	(1000.00)	1.12	99.41
0.0	(1000.00)	0.5	(707.10)	1.11	98.29
0.5	(707.10)	1.0	(500.00)	0.72	97.18
1.0	(500.00)	1.5	(353.55)	0.36	96.46
1.5	(353.55)	2.0	(250.00)	0.28	96.1
2.0	(250.00)	2.5	(176.78)	0.46	95.82
2.5	(176.78)	3.0	(125.00)	0.91	95.36
3.0	(125.00)	3.5	(88.39)	1.96	94.45
3.5	(88.39)	4.0	(62.50)	3.94	92.49
4.0	(62.50)	4.5	(44.19)	6.73	88.55
4.5	(44.19)	5.0	(31.25)	9.38	81.82
5.0	(31.25)	5.5	(22.10)	10.69	72.44
5.5	(22.10)	6.0	(15.63)	10.35	61.75
6.0	(15.63)	6.5	(11.05)	9.05	51.41
6.5	(11.05)	7.0	(7.81)	7.66	42.36
7.0	(7.81)	7.5	(5.52)	6.63	34.7
7.5	(5.52)	8.0	(3.90)	5.91	28.06

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.32	22.15
8.5	(2.76)	9.0	(1.95)	4.76	16.83
9.0	(1.95)	9.5	(1.38)	4.15	12.08
9.5	(1.38)	10.0	(0.98)	3.37	7.93
10.0	(0.98)	10.5	(0.69)	2.43	4.56
10.5	(0.69)	11.0	(0.49)	1.45	2.13
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:03:13 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 26.71

D[4,3] = 63.08um = 3.99phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.52um = 8.63phi

D[v,0.5] = 14.31um = 6.13phi
D[v,0.84] = 48.72um = 4.36phi
D[v,0.95] = 165.47um = 2.6phi

Kurtosis = 32.25
Skewness = 5.52
Standard Deviation = 209.25 um = 2.26phi

Inclusive SD (Sorting Coeff.) = 2.18 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.03 phi (Mesokurtic)

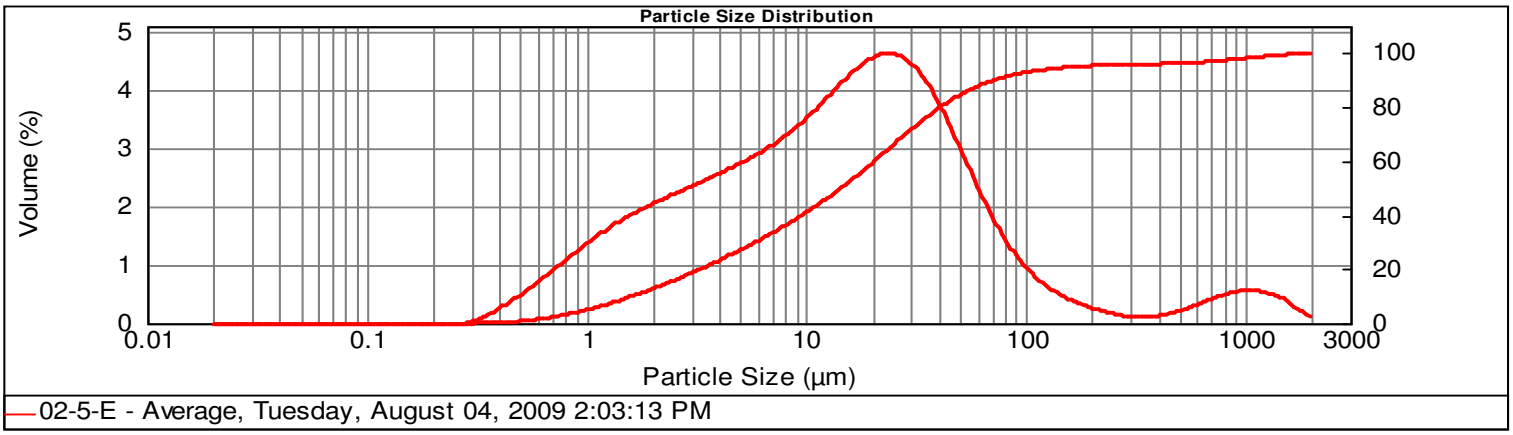
Inclusive Skewness = -0.11 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.79
% Fine Silt (2-3.9 um) = 10.02

d (0.1) : 1.608 **um**
d (0.5) : 14.309 **d (0.9) : 71.133**

Wentworth
% Clay (0-3.9 um) = 22.81
% Silt (3.91-31 um) = 49.85
% Coarse Silt (31 - 62.5 um) = 15.66
% Very Fine sand (62.5 - 125 um) = 5.78

% Fine sand (125-250 um) = 1.59
% Medium sand (250-500 um) = .6
% Coarse sand (500-1000 um) = 1.86
% Very Coarse sand (1000 - 2000 um) = 1.85



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.65	100
-0.5	(1414.21)	0.0	(1000.00)	1.2	99.35
0.0	(1000.00)	0.5	(707.10)	1.15	98.15
0.5	(707.10)	1.0	(500.00)	0.71	97
1.0	(500.00)	1.5	(353.55)	0.33	96.29
1.5	(353.55)	2.0	(250.00)	0.27	95.97
2.0	(250.00)	2.5	(176.78)	0.54	95.69
2.5	(176.78)	3.0	(125.00)	1.05	95.15
3.0	(125.00)	3.5	(88.39)	2	94.1
3.5	(88.39)	4.0	(62.50)	3.78	92.1
4.0	(62.50)	4.5	(44.19)	6.41	88.32
4.5	(44.19)	5.0	(31.25)	9.02	81.91
5.0	(31.25)	5.5	(22.10)	10.36	72.89
5.5	(22.10)	6.0	(15.63)	10.12	62.53
6.0	(15.63)	6.5	(11.05)	8.98	52.4
6.5	(11.05)	7.0	(7.81)	7.73	43.43
7.0	(7.81)	7.5	(5.52)	6.78	35.69
7.5	(5.52)	8.0	(3.90)	6.07	28.91

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.47	22.84
8.5	(2.76)	9.0	(1.95)	4.89	17.37
9.0	(1.95)	9.5	(1.38)	4.27	12.48
9.5	(1.38)	10.0	(0.98)	3.48	8.21
10.0	(0.98)	10.5	(0.69)	2.52	4.72
10.5	(0.69)	11.0	(0.49)	1.51	2.21
11.0	(0.49)	11.5	(0.35)	0.63	0.7
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:07:50 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.80

D[4,3] = 56.41um = 4.15phi
D[v,0.05] = 1.01um = 9.96phi
D[v,0.16] = 2.47um = 8.66phi

D[v,0.5] = 13.59um = 6.2phi
D[v,0.84] = 44.69um = 4.48phi
D[v,0.95] = 126.73um = 2.98phi

Kurtosis = 37.8
Skewness = 5.92
Standard Deviation = 192.16 um = 2.38phi

Inclusive SD (Sorting Coeff.) = 2.1 phi (Very Poorly Sorted)
Inclusive Kurtosis = .99 phi (Mesokurtic)

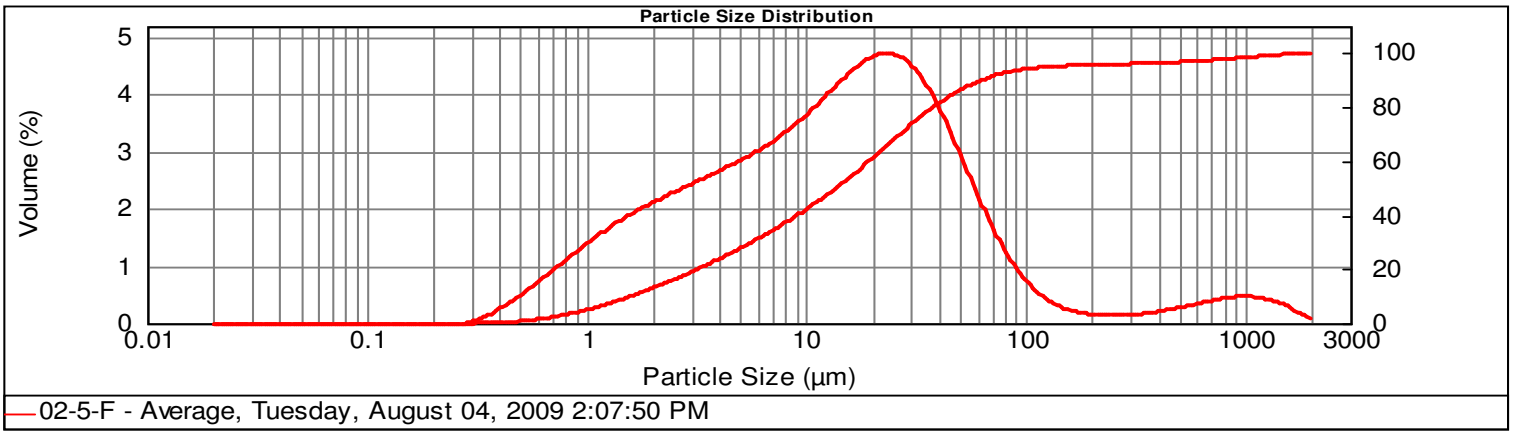
Inclusive Skewness = -0.13 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 12.98
% Fine Silt (2-3.9 um) = 10.34

d (0.1) : 1.594 **um**
d (0.5) : 13.590 **d (0.9) : 62.425**

Wentworth
% Clay (0-3.9 um) = 23.32
% Silt (3.91-31 um) = 51.17
% Coarse Silt (31 - 62.5 um) = 15.53
% Very Fine sand (62.5 - 125 um) = 4.95

% Fine sand (125-250 um) = .95
% Medium sand (250-500 um) = .83
% Coarse sand (500-1000 um) = 1.77
% Very Coarse sand (1000 - 2000 um) = 1.49



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.52	100
-0.5	(1414.21)	0.0	(1000.00)	0.97	99.48
0.0	(1000.00)	0.5	(707.10)	1.01	98.51
0.5	(707.10)	1.0	(500.00)	0.76	97.5
1.0	(500.00)	1.5	(353.55)	0.49	96.74
1.5	(353.55)	2.0	(250.00)	0.34	96.25
2.0	(250.00)	2.5	(176.78)	0.34	95.92
2.5	(176.78)	3.0	(125.00)	0.61	95.58
3.0	(125.00)	3.5	(88.39)	1.52	94.96
3.5	(88.39)	4.0	(62.50)	3.43	93.45
4.0	(62.50)	4.5	(44.19)	6.26	90.02
4.5	(44.19)	5.0	(31.25)	9.03	83.75
5.0	(31.25)	5.5	(22.10)	10.5	74.72
5.5	(22.10)	6.0	(15.63)	10.35	64.22
6.0	(15.63)	6.5	(11.05)	9.23	53.87
6.5	(11.05)	7.0	(7.81)	7.98	44.64
7.0	(7.81)	7.5	(5.52)	7.02	36.66
7.5	(5.52)	8.0	(3.90)	6.29	29.64

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.66	23.35
8.5	(2.76)	9.0	(1.95)	5.04	17.69
9.0	(1.95)	9.5	(1.38)	4.37	12.65
9.5	(1.38)	10.0	(0.98)	3.54	8.28
10.0	(0.98)	10.5	(0.69)	2.54	4.74
10.5	(0.69)	11.0	(0.49)	1.51	2.2
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:12:30 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 23.28

D[4,3] = 64.09um = 3.96phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.57um = 8.6phi

D[v,0.5] = 14.65um = 6.09phi
D[v,0.84] = 49.43um = 4.34phi
D[v,0.95] = 200.25um = 2.32phi

Kurtosis = 32.07
Skewness = 5.48
Standard Deviation = 209.2 um = 2.26phi

Inclusive SD (Sorting Coeff.) = 2.22 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.07 phi (Mesokurtic)

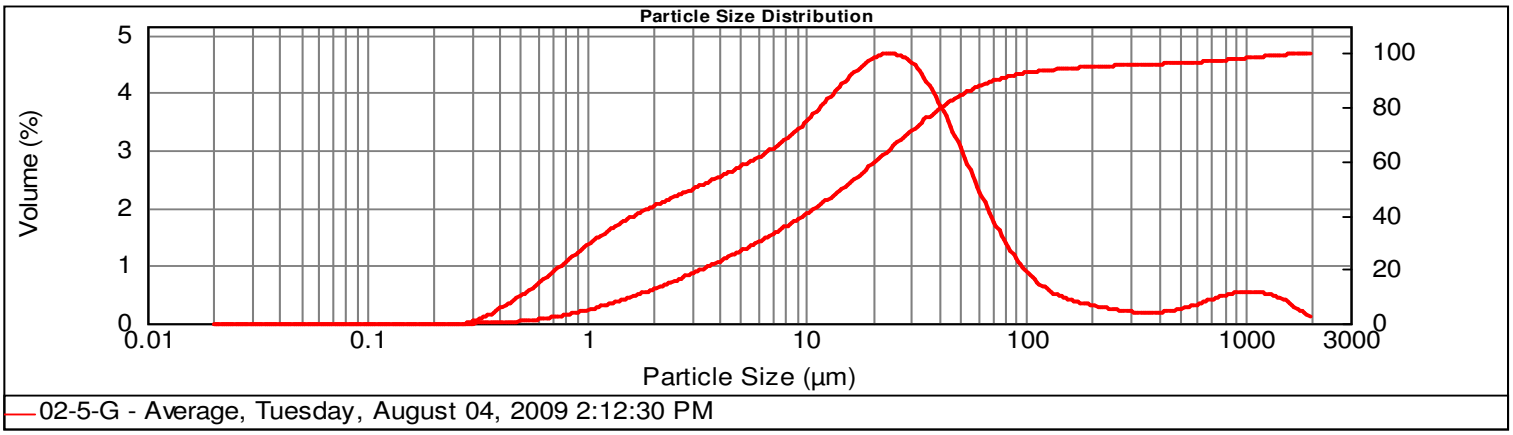
Inclusive Skewness = -0.09 (Near Symmetrical)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 12.53
% Fine Silt (2-3.9 um) = 9.88

d (0.1) : 1.638 **um**
d (0.5) : 14.647 **d (0.9) : 72.713**

Wentworth
% Clay (0-3.9 um) = 22.41
% Silt (3.91-31 um) = 49.78
% Coarse Silt (31 - 62.5 um) = 15.88
% Very Fine sand (62.5 - 125 um) = 5.63

% Fine sand (125-250 um) = 1.7
% Medium sand (250-500 um) = .91
% Coarse sand (500-1000 um) = 1.86
% Very Coarse sand (1000 - 2000 um) = 1.83



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.65	100
-0.5	(1414.21)	0.0	(1000.00)	1.18	99.35
0.0	(1000.00)	0.5	(707.10)	1.12	98.17
0.5	(707.10)	1.0	(500.00)	0.74	97.05
1.0	(500.00)	1.5	(353.55)	0.45	96.31
1.5	(353.55)	2.0	(250.00)	0.46	95.86
2.0	(250.00)	2.5	(176.78)	0.67	95.4
2.5	(176.78)	3.0	(125.00)	1.03	94.73
3.0	(125.00)	3.5	(88.39)	1.89	93.7
3.5	(88.39)	4.0	(62.50)	3.74	91.81
4.0	(62.50)	4.5	(44.19)	6.49	88.07
4.5	(44.19)	5.0	(31.25)	9.15	81.58
5.0	(31.25)	5.5	(22.10)	10.47	72.43
5.5	(22.10)	6.0	(15.63)	10.18	61.95
6.0	(15.63)	6.5	(11.05)	8.97	51.78
6.5	(11.05)	7.0	(7.81)	7.67	42.81
7.0	(7.81)	7.5	(5.52)	6.7	35.14
7.5	(5.52)	8.0	(3.90)	6	28.43

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.39	22.44
8.5	(2.76)	9.0	(1.95)	4.82	17.04
9.0	(1.95)	9.5	(1.38)	4.2	12.22
9.5	(1.38)	10.0	(0.98)	3.42	8.02
10.0	(0.98)	10.5	(0.69)	2.46	4.59
10.5	(0.69)	11.0	(0.49)	1.46	2.13
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:17:00 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.03

D[4,3] = 62.07um = 4.01phi
D[v,0.05] = 1.02um = 9.94phi
D[v,0.16] = 2.57um = 8.6phi

D[v,0.5] = 14.84um = 6.07phi
D[v,0.84] = 50.39um = 4.31phi
D[v,0.95] = 172.88um = 2.53phi

Kurtosis = 34.12
Skewness = 5.64
Standard Deviation = 202.64 um = 2.3phi

Inclusive SD (Sorting Coeff.) = 2.2 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.03 phi (Mesokurtic)

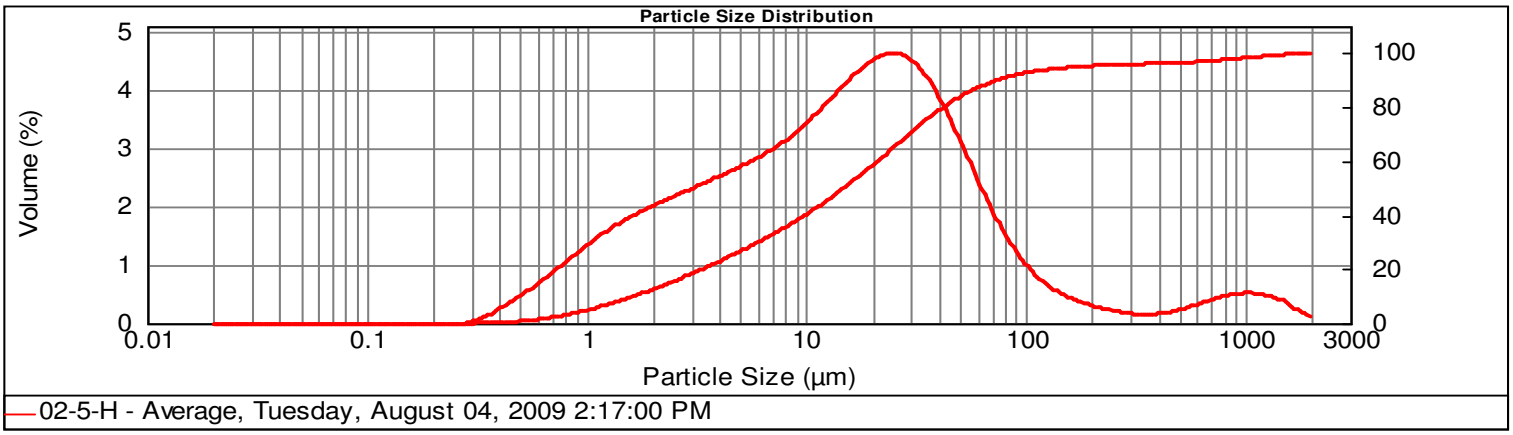
Inclusive Skewness = -0.11 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.55
% Fine Silt (2-3.9 um) = 9.87

d (0.1) : 1.635 **um**
d (0.5) : 14.836 **d (0.9) : 73.449**

Wentworth
% Clay (0-3.9 um) = 22.42
% Silt (3.91-31 um) = 49.21
% Coarse Silt (31 - 62.5 um) = 16.21
% Very Fine sand (62.5 - 125 um) = 6.1

% Fine sand (125-250 um) = 1.76
% Medium sand (250-500 um) = .79
% Coarse sand (500-1000 um) = 1.81
% Very Coarse sand (1000 - 2000 um) = 1.7



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.6	100
-0.5	(1414.21)	0.0	(1000.00)	1.11	99.4
0.0	(1000.00)	0.5	(707.10)	1.08	98.3
0.5	(707.10)	1.0	(500.00)	0.72	97.21
1.0	(500.00)	1.5	(353.55)	0.4	96.49
1.5	(353.55)	2.0	(250.00)	0.39	96.09
2.0	(250.00)	2.5	(176.78)	0.64	95.7
2.5	(176.78)	3.0	(125.00)	1.12	95.05
3.0	(125.00)	3.5	(88.39)	2.1	93.94
3.5	(88.39)	4.0	(62.50)	4	91.83
4.0	(62.50)	4.5	(44.19)	6.72	87.84
4.5	(44.19)	5.0	(31.25)	9.26	81.12
5.0	(31.25)	5.5	(22.10)	10.43	71.86
5.5	(22.10)	6.0	(15.63)	10.03	61.43
6.0	(15.63)	6.5	(11.05)	8.81	51.4
6.5	(11.05)	7.0	(7.81)	7.56	42.6
7.0	(7.81)	7.5	(5.52)	6.63	35.04
7.5	(5.52)	8.0	(3.90)	5.96	28.41
8.0	(3.90)	8.5	(2.76)	5.38	22.44
8.5	(2.76)	9.0	(1.95)	4.82	17.06
9.0	(1.95)	9.5	(1.38)	4.2	12.24
9.5	(1.38)	10.0	(0.98)	3.42	8.03
10.0	(0.98)	10.5	(0.69)	2.47	4.61
10.5	(0.69)	11.0	(0.49)	1.47	2.14
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:23:03 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.27

D[4,3] = 52.6um = 4.25phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 14.59um = 6.1phi
D[v,0.84] = 46.03um = 4.44phi
D[v,0.95] = 117.77um = 3.09phi

Kurtosis = 45.05
Skewness = 6.44
Standard Deviation = 179.49 um = 2.48phi

Inclusive SD (Sorting Coeff.) = 2.08 phi (Very Poorly Sorted)
Inclusive Kurtosis = .98 phi (Mesokurtic)

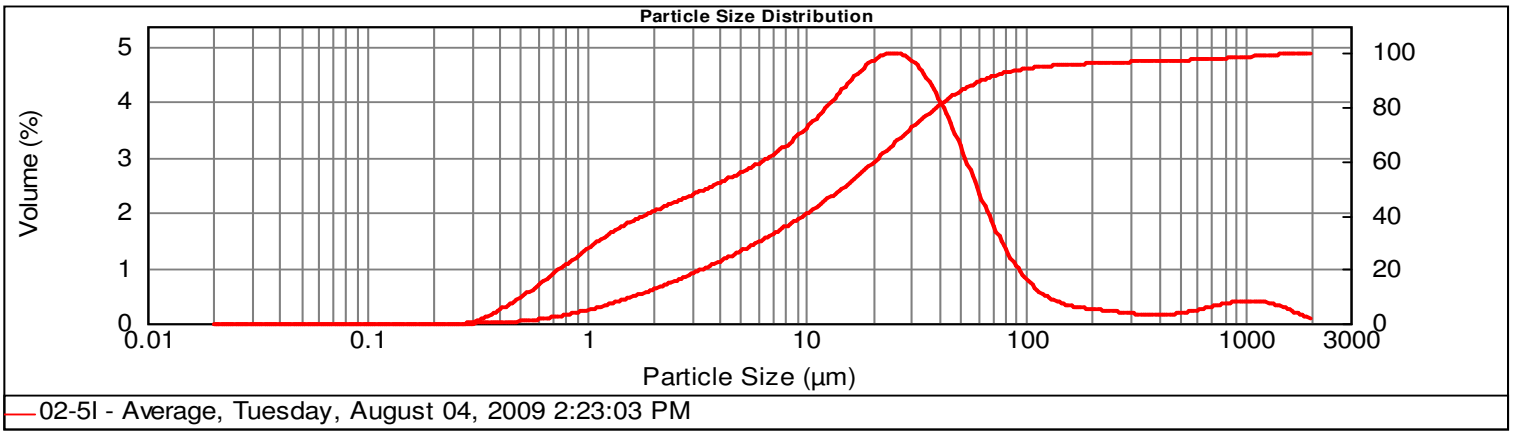
Inclusive Skewness = -0.16 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 12.48
% Fine Silt (2-3.9 um) = 9.87

d (0.1) : 1.644 **um**
d (0.5) : 14.585 **d (0.9) : 63.207**

Wentworth
% Clay (0-3.9 um) = 22.35
% Silt (3.91-31 um) = 50.76
% Coarse Silt (31 - 62.5 um) = 16.72
% Very Fine sand (62.5 - 125 um) = 5.36

% Fine sand (125-250 um) = 1.37
% Medium sand (250-500 um) = .75
% Coarse sand (500-1000 um) = 1.36
% Very Coarse sand (1000 - 2000 um) = 1.32



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.46	100
-0.5	(1414.21)	0.0	(1000.00)	0.86	99.54
0.0	(1000.00)	0.5	(707.10)	0.83	98.68
0.5	(707.10)	1.0	(500.00)	0.54	97.85
1.0	(500.00)	1.5	(353.55)	0.35	97.31
1.5	(353.55)	2.0	(250.00)	0.4	96.97
2.0	(250.00)	2.5	(176.78)	0.56	96.56
2.5	(176.78)	3.0	(125.00)	0.81	96
3.0	(125.00)	3.5	(88.39)	1.66	95.2
3.5	(88.39)	4.0	(62.50)	3.7	93.54
4.0	(62.50)	4.5	(44.19)	6.8	89.83
4.5	(44.19)	5.0	(31.25)	9.68	83.04
5.0	(31.25)	5.5	(22.10)	10.96	73.36
5.5	(22.10)	6.0	(15.63)	10.47	62.4
6.0	(15.63)	6.5	(11.05)	9.1	51.93
6.5	(11.05)	7.0	(7.81)	7.73	42.83
7.0	(7.81)	7.5	(5.52)	6.73	35.1
7.5	(5.52)	8.0	(3.90)	6	28.37

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.39	22.37
8.5	(2.76)	9.0	(1.95)	4.81	16.99
9.0	(1.95)	9.5	(1.38)	4.2	12.17
9.5	(1.38)	10.0	(0.98)	3.42	7.97
10.0	(0.98)	10.5	(0.69)	2.45	4.56
10.5	(0.69)	11.0	(0.49)	1.45	2.1
11.0	(0.49)	11.5	(0.35)	0.59	0.65
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 02-5-J - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:27:39 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.31

D[4,3] = 46.81um = 4.42phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.67um = 8.55phi

D[v,0.5] = 15.41um = 6.02phi
D[v,0.84] = 47.34um = 4.4phi
D[v,0.95] = 89.06um = 3.49phi

Kurtosis = 55.93
Skewness = 7.18
Standard Deviation = 163.37 um = 2.61phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

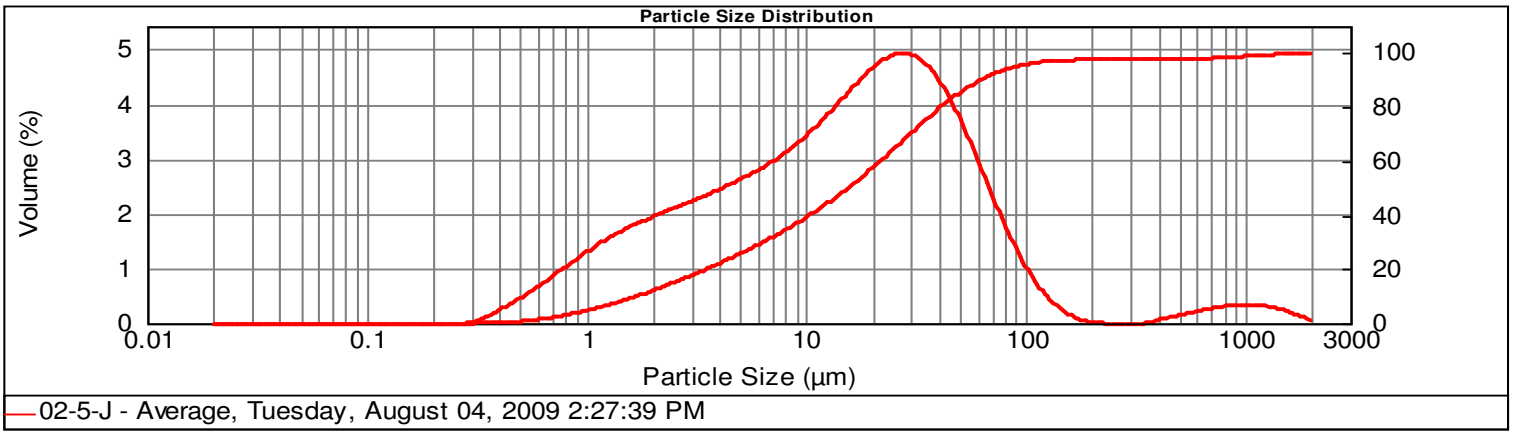
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.32 phi (Silt)

USGS
% Clay (0-2 um) = 12.14
% Fine Silt (2-3.9 um) = 9.5

d (0.1) : 1.680 um
d (0.5) : 15.409
d (0.9) : 61.928

Wentworth
% Clay (0-3.9 um) = 21.64
% Silt (3.91-31 um) = 49.85
% Coarse Silt (31 - 62.5 um) = 18.67
% Very Fine sand (62.5 - 125 um) = 6.81

% Fine sand (125-250 um) = .55
% Medium sand (250-500 um) = .17
% Coarse sand (500-1000 um) = 1.2
% Very Coarse sand (1000 - 2000 um) = 1.1



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.38	100
-0.5	(1414.21)	0.0	(1000.00)	0.72	99.62
0.0	(1000.00)	0.5	(707.10)	0.72	98.9
0.5	(707.10)	1.0	(500.00)	0.48	98.18
1.0	(500.00)	1.5	(353.55)	0.17	97.71
1.5	(353.55)	2.0	(250.00)	0	97.53
2.0	(250.00)	2.5	(176.78)	0.03	97.53
2.5	(176.78)	3.0	(125.00)	0.53	97.51
3.0	(125.00)	3.5	(88.39)	2.05	96.98
3.5	(88.39)	4.0	(62.50)	4.76	94.93
4.0	(62.50)	4.5	(44.19)	7.99	90.17
4.5	(44.19)	5.0	(31.25)	10.42	82.18
5.0	(31.25)	5.5	(22.10)	11.1	71.75
5.5	(22.10)	6.0	(15.63)	10.27	60.66
6.0	(15.63)	6.5	(11.05)	8.85	50.38
6.5	(11.05)	7.0	(7.81)	7.52	41.53
7.0	(7.81)	7.5	(5.52)	6.54	34.01
7.5	(5.52)	8.0	(3.90)	5.8	27.47

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.19	21.67
8.5	(2.76)	9.0	(1.95)	4.64	16.48
9.0	(1.95)	9.5	(1.38)	4.06	11.84
9.5	(1.38)	10.0	(0.98)	3.32	7.79
10.0	(0.98)	10.5	(0.69)	2.4	4.47
10.5	(0.69)	11.0	(0.49)	1.43	2.07
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:05:20 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.47

D[4,3] = 33.93um = 4.88phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.73um = 8.52phi

D[v,0.5] = 15.77um = 5.99phi
D[v,0.84] = 45.04um = 4.47phi
D[v,0.95] = 74.07um = 3.75phi

Kurtosis = 114.02
Skewness = 10.02
Standard Deviation = 110.63 um = 3.18phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

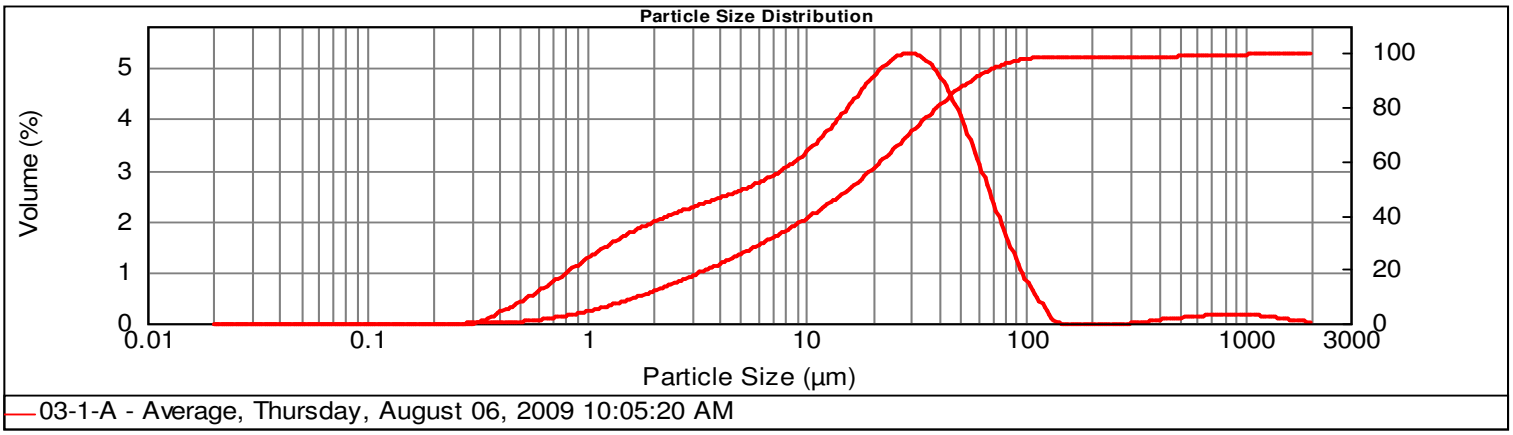
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 11.77
% Fine Silt (2-3.9 um) = 9.66

d (0.1) : 1.736 **um**
d (0.5) : 15.769 **d (0.9) : 56.543**

Wentworth
% Clay (0-3.9 um) = 21.43
% Silt (3.91-31 um) = 50.37
% Coarse Silt (31 - 62.5 um) = 20.34
% Very Fine sand (62.5 - 125 um) = 6.5

% Fine sand (125-250 um) = .06
% Medium sand (250-500 um) = .17
% Coarse sand (500-1000 um) = .67
% Very Coarse sand (1000 - 2000 um) = .46



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.14	100
-0.5	(1414.21)	0.0	(1000.00)	0.33	99.86
0.0	(1000.00)	0.5	(707.10)	0.37	99.54
0.5	(707.10)	1.0	(500.00)	0.3	99.16
1.0	(500.00)	1.5	(353.55)	0.17	98.86
1.5	(353.55)	2.0	(250.00)	0.01	98.7
2.0	(250.00)	2.5	(176.78)	0	98.69
2.5	(176.78)	3.0	(125.00)	0.06	98.69
3.0	(125.00)	3.5	(88.39)	1.64	98.63
3.5	(88.39)	4.0	(62.50)	4.86	97
4.0	(62.50)	4.5	(44.19)	8.7	92.14
4.5	(44.19)	5.0	(31.25)	11.37	83.44
5.0	(31.25)	5.5	(22.10)	11.8	72.07
5.5	(22.10)	6.0	(15.63)	10.52	60.27
6.0	(15.63)	6.5	(11.05)	8.77	49.75
6.5	(11.05)	7.0	(7.81)	7.35	40.97
7.0	(7.81)	7.5	(5.52)	6.4	33.62
7.5	(5.52)	8.0	(3.90)	5.77	27.22
8.0	(3.90)	8.5	(2.76)	5.26	21.45
8.5	(2.76)	9.0	(1.95)	4.73	16.19
9.0	(1.95)	9.5	(1.38)	4.08	11.47
9.5	(1.38)	10.0	(0.98)	3.25	7.39
10.0	(0.98)	10.5	(0.69)	2.28	4.13
10.5	(0.69)	11.0	(0.49)	1.32	1.85
11.0	(0.49)	11.5	(0.35)	0.51	0.54
11.5	(0.35)	12.0	(0.24)	0.03	0.03
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:10:17 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.66

D[4,3] = 26.33um = 5.25phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 14.08um = 6.15phi
D[v,0.84] = 40.62um = 4.62phi
D[v,0.95] = 65.97um = 3.92phi

Kurtosis = 154.32
Skewness = 11.5
Standard Deviation = 71.8 um = 3.8phi

Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

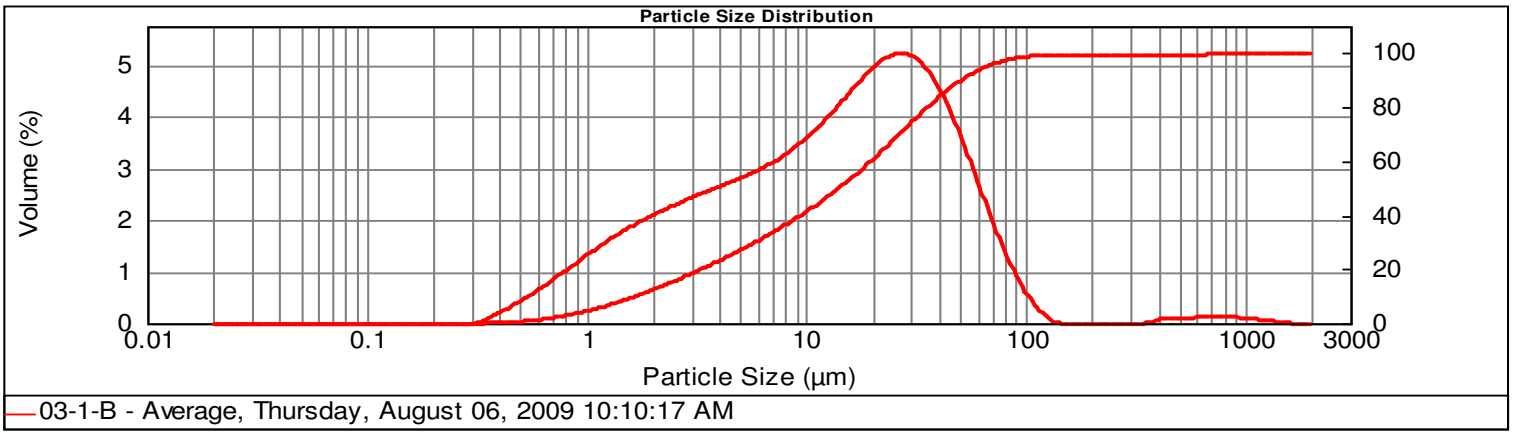
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.46 phi (Silt)

USGS
% Clay (0-2 um) = 12.31
% Fine Silt (2-3.9 um) = 10.34

d (0.1) : 1.678 **um**
d (0.5) : 14.076 **d (0.9) : 50.856**

Wentworth
% Clay (0-3.9 um) = 22.65
% Silt (3.91-31 um) = 52.7
% Coarse Silt (31 - 62.5 um) = 18.8
% Very Fine sand (62.5 - 125 um) = 5.04

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .15
% Coarse sand (500-1000 um) = .5
% Very Coarse sand (1000 - 2000 um) = .15



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.01	100
-0.5	(1414.21)	0.0	(1000.00)	0.14	99.99
0.0	(1000.00)	0.5	(707.10)	0.25	99.85
0.5	(707.10)	1.0	(500.00)	0.25	99.6
1.0	(500.00)	1.5	(353.55)	0.15	99.36
1.5	(353.55)	2.0	(250.00)	0	99.21
2.0	(250.00)	2.5	(176.78)	0	99.21
2.5	(176.78)	3.0	(125.00)	0.02	99.21
3.0	(125.00)	3.5	(88.39)	1.11	99.18
3.5	(88.39)	4.0	(62.50)	3.93	98.08
4.0	(62.50)	4.5	(44.19)	7.73	94.15
4.5	(44.19)	5.0	(31.25)	10.8	86.41
5.0	(31.25)	5.5	(22.10)	11.78	75.61
5.5	(22.10)	6.0	(15.63)	10.87	63.84
6.0	(15.63)	6.5	(11.05)	9.27	52.96
6.5	(11.05)	7.0	(7.81)	7.87	43.69
7.0	(7.81)	7.5	(5.52)	6.91	35.83
7.5	(5.52)	8.0	(3.90)	6.24	28.92

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.66	22.67
8.5	(2.76)	9.0	(1.95)	5.03	17.02
9.0	(1.95)	9.5	(1.38)	4.31	11.98
9.5	(1.38)	10.0	(0.98)	3.41	7.68
10.0	(0.98)	10.5	(0.69)	2.38	4.27
10.5	(0.69)	11.0	(0.49)	1.37	1.89
11.0	(0.49)	11.5	(0.35)	0.52	0.53
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:20:51 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.06

D[4,3] = 28.01um = 5.16phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.66um = 8.56phi

D[v,0.5] = 14.51um = 6.11phi
D[v,0.84] = 40.87um = 4.61phi
D[v,0.95] = 66.16um = 3.92phi

Kurtosis = 127.1
Skewness = 10.58
Standard Deviation = 80.91 um = 3.63phi

Inclusive SD (Sorting Coeff.) = 1.89 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

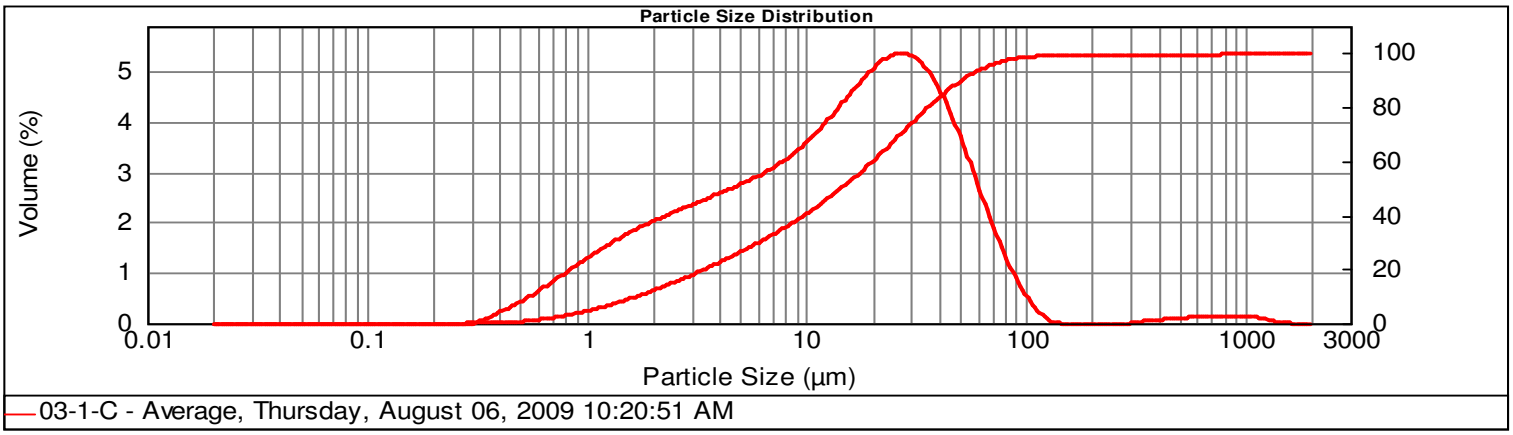
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.43 phi (Silt)

USGS
% Clay (0-2 um) = 12.03
% Fine Silt (2-3.9 um) = 9.98

d (0.1) : 1.705 **um**
d (0.5) : 14.511 **d (0.9) : 51.023**

Wentworth
% Clay (0-3.9 um) = 22.01
% Silt (3.91-31 um) = 52.95
% Coarse Silt (31 - 62.5 um) = 19.14
% Very Fine sand (62.5 - 125 um) = 4.89

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .19
% Coarse sand (500-1000 um) = .59
% Very Coarse sand (1000 - 2000 um) = .21



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.21	100
0.0	(1000.00)	0.5	(707.10)	0.31	99.79
0.5	(707.10)	1.0	(500.00)	0.28	99.48
1.0	(500.00)	1.5	(353.55)	0.17	99.2
1.5	(353.55)	2.0	(250.00)	0.02	99.03
2.0	(250.00)	2.5	(176.78)	0	99.01
2.5	(176.78)	3.0	(125.00)	0.02	99.01
3.0	(125.00)	3.5	(88.39)	1.01	98.99
3.5	(88.39)	4.0	(62.50)	3.87	97.97
4.0	(62.50)	4.5	(44.19)	7.82	94.1
4.5	(44.19)	5.0	(31.25)	11.04	86.28
5.0	(31.25)	5.5	(22.10)	12.04	75.24
5.5	(22.10)	6.0	(15.63)	11.06	63.2
6.0	(15.63)	6.5	(11.05)	9.35	52.14
6.5	(11.05)	7.0	(7.81)	7.85	42.79
7.0	(7.81)	7.5	(5.52)	6.81	34.94
7.5	(5.52)	8.0	(3.90)	6.09	28.13
8.0	(3.90)	8.5	(2.76)	5.47	22.04
8.5	(2.76)	9.0	(1.95)	4.85	16.57
9.0	(1.95)	9.5	(1.38)	4.16	11.72
9.5	(1.38)	10.0	(0.98)	3.31	7.56
10.0	(0.98)	10.5	(0.69)	2.33	4.25
10.5	(0.69)	11.0	(0.49)	1.35	1.92
11.0	(0.49)	11.5	(0.35)	0.53	0.57
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:15:01 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.73

D[4,3] = 25.86um = 5.27phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.54um = 8.62phi

D[v,0.5] = 13.55um = 6.21phi
D[v,0.84] = 38.82um = 4.69phi
D[v,0.95] = 63um = 3.99phi

Kurtosis = 127.71
Skewness = 10.61
Standard Deviation = 71.65 um = 3.8phi

Inclusive SD (Sorting Coeff.) = 1.88 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

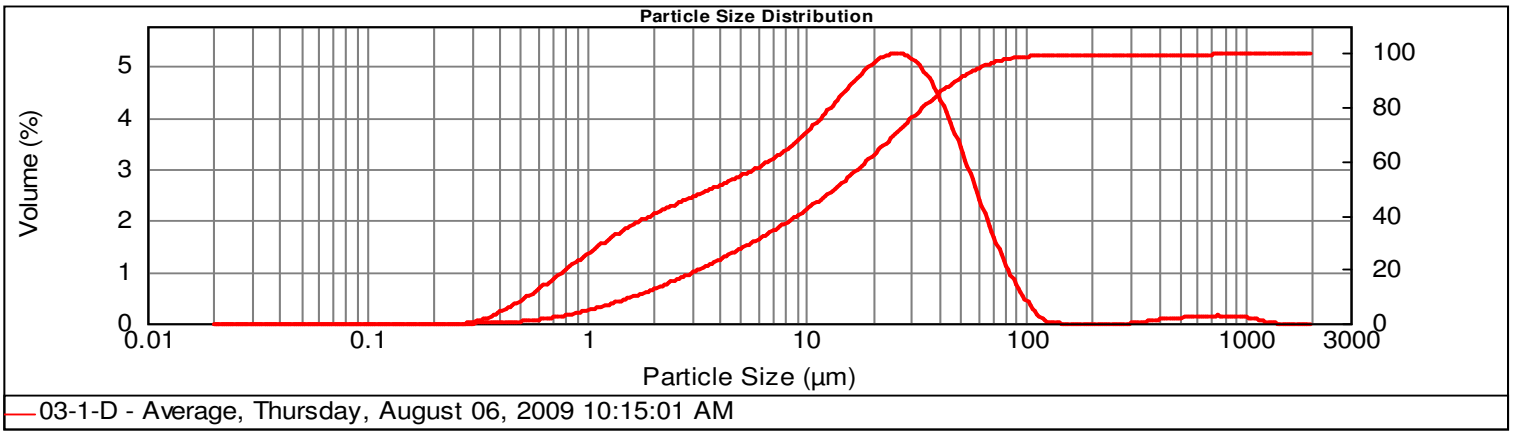
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 12.53
% Fine Silt (2-3.9 um) = 10.43

d (0.1) : 1.652 **um**
d (0.5) : 13.551 **d (0.9) : 48.573**

Wentworth
% Clay (0-3.9 um) = 22.96
% Silt (3.91-31 um) = 53.88
% Coarse Silt (31 - 62.5 um) = 18.04
% Very Fine sand (62.5 - 125 um) = 4.22

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .18
% Coarse sand (500-1000 um) = .61
% Very Coarse sand (1000 - 2000 um) = .11



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.11	100
0.0	(1000.00)	0.5	(707.10)	0.31	99.89
0.5	(707.10)	1.0	(500.00)	0.29	99.57
1.0	(500.00)	1.5	(353.55)	0.17	99.28
1.5	(353.55)	2.0	(250.00)	0.01	99.11
2.0	(250.00)	2.5	(176.78)	0	99.1
2.5	(176.78)	3.0	(125.00)	0	99.1
3.0	(125.00)	3.5	(88.39)	0.79	99.1
3.5	(88.39)	4.0	(62.50)	3.43	98.31
4.0	(62.50)	4.5	(44.19)	7.24	94.88
4.5	(44.19)	5.0	(31.25)	10.54	87.64
5.0	(31.25)	5.5	(22.10)	11.83	77.1
5.5	(22.10)	6.0	(15.63)	11.14	65.28
6.0	(15.63)	6.5	(11.05)	9.59	54.14
6.5	(11.05)	7.0	(7.81)	8.14	44.54
7.0	(7.81)	7.5	(5.52)	7.08	36.41
7.5	(5.52)	8.0	(3.90)	6.34	29.32

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.71	22.99
8.5	(2.76)	9.0	(1.95)	5.08	17.28
9.0	(1.95)	9.5	(1.38)	4.35	12.2
9.5	(1.38)	10.0	(0.98)	3.45	7.85
10.0	(0.98)	10.5	(0.69)	2.42	4.39
10.5	(0.69)	11.0	(0.49)	1.39	1.98
11.0	(0.49)	11.5	(0.35)	0.54	0.58
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:26:05 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.06

D[4,3] = 34.98um = 4.84phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.41um = 8.7phi

D[v,0.5] = 11.74um = 6.41phi
D[v,0.84] = 37.55um = 4.74phi
D[v,0.95] = 75.05um = 3.74phi

Kurtosis = 84.17
Skewness = 8.6
Standard Deviation = 125.98 um = 2.99phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

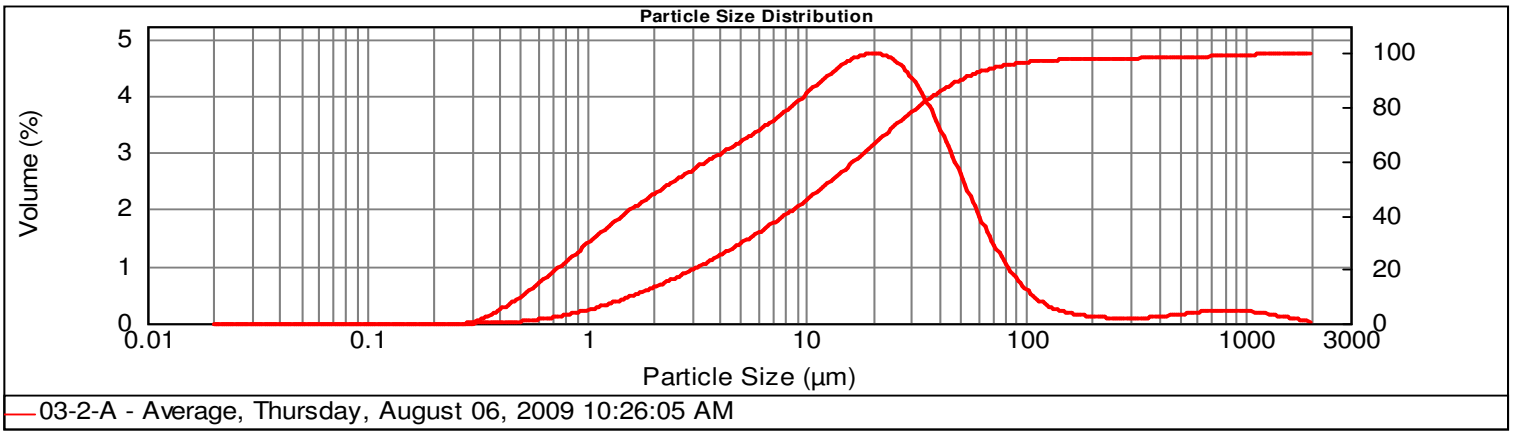
Inclusive Skewness = -0.14 (Coarse Skewed)
Inclusive Mean = 6.61 phi (Silt)

USGS
% Clay (0-2 um) = 13.11
% Fine Silt (2-3.9 um) = 11.36

d (0.1) : 1.599 **um**
d (0.5) : 11.744 **d (0.9) : 50.118**

Wentworth
% Clay (0-3.9 um) = 24.48
% Silt (3.91-31 um) = 54.53
% Coarse Silt (31 - 62.5 um) = 14.19
% Very Fine sand (62.5 - 125 um) = 4.1

% Fine sand (125-250 um) = .72
% Medium sand (250-500 um) = .48
% Coarse sand (500-1000 um) = .94
% Very Coarse sand (1000 - 2000 um) = .57



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.4	99.83
0.0	(1000.00)	0.5	(707.10)	0.51	99.43
0.5	(707.10)	1.0	(500.00)	0.43	98.92
1.0	(500.00)	1.5	(353.55)	0.27	98.49
1.5	(353.55)	2.0	(250.00)	0.2	98.21
2.0	(250.00)	2.5	(176.78)	0.25	98.01
2.5	(176.78)	3.0	(125.00)	0.47	97.76
3.0	(125.00)	3.5	(88.39)	1.21	97.29
3.5	(88.39)	4.0	(62.50)	2.89	96.09
4.0	(62.50)	4.5	(44.19)	5.56	93.19
4.5	(44.19)	5.0	(31.25)	8.41	87.64
5.0	(31.25)	5.5	(22.10)	10.28	79.23
5.5	(22.10)	6.0	(15.63)	10.66	68.95
6.0	(15.63)	6.5	(11.05)	9.97	58.29
6.5	(11.05)	7.0	(7.81)	8.89	48.32
7.0	(7.81)	7.5	(5.52)	7.88	39.43
7.5	(5.52)	8.0	(3.90)	7.04	31.55
8.0	(3.90)	8.5	(2.76)	6.27	24.51
8.5	(2.76)	9.0	(1.95)	5.47	18.23
9.0	(1.95)	9.5	(1.38)	4.59	12.77
9.5	(1.38)	10.0	(0.98)	3.6	8.17
10.0	(0.98)	10.5	(0.69)	2.51	4.58
10.5	(0.69)	11.0	(0.49)	1.45	2.07
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:30:40 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.96

D[4,3] = 31.49um = 4.99phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 12.22um = 6.35phi
D[v,0.84] = 37.4um = 4.74phi
D[v,0.95] = 67.11um = 3.9phi

Kurtosis = 104.42
Skewness = 9.61
Standard Deviation = 114.16 um = 3.13phi

Inclusive SD (Sorting Coeff.) = 1.89 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

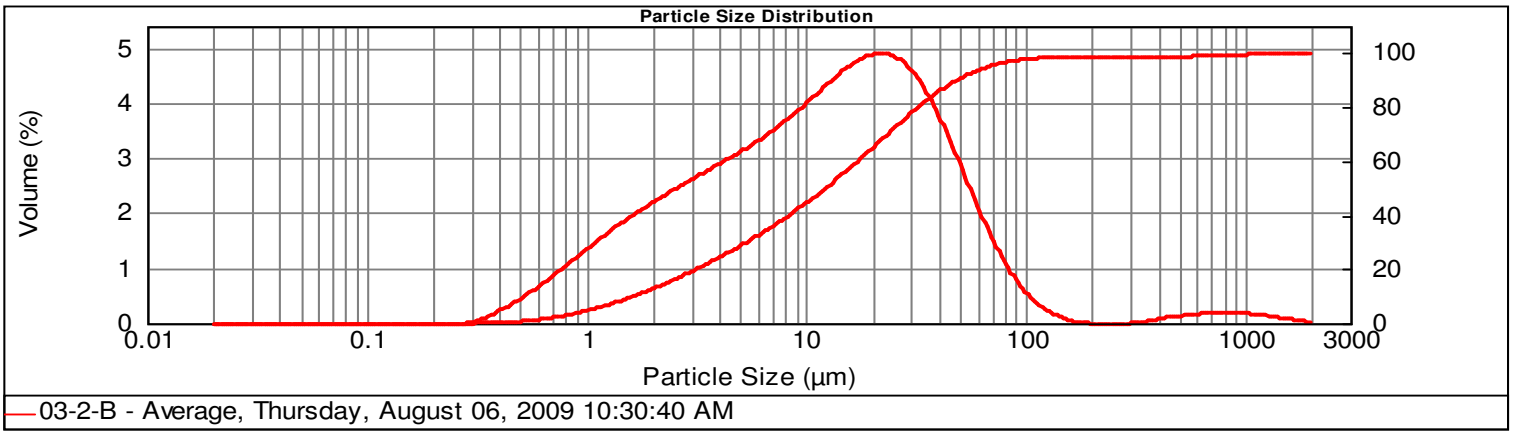
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.58 phi (Silt)

USGS
% Clay (0-2 um) = 12.72
% Fine Silt (2-3.9 um) = 11.06

d (0.1) : 1.638 um
d (0.5) : 12.218
d (0.9) : 48.460

Wentworth
% Clay (0-3.9 um) = 23.78
% Silt (3.91-31 um) = 54.96
% Coarse Silt (31 - 62.5 um) = 15.41
% Very Fine sand (62.5 - 125 um) = 4.16

% Fine sand (125-250 um) = .21
% Medium sand (250-500 um) = .21
% Coarse sand (500-1000 um) = .8
% Very Coarse sand (1000 - 2000 um) = .47



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.14	100
-0.5	(1414.21)	0.0	(1000.00)	0.33	99.86
0.0	(1000.00)	0.5	(707.10)	0.43	99.53
0.5	(707.10)	1.0	(500.00)	0.37	99.1
1.0	(500.00)	1.5	(353.55)	0.2	98.73
1.5	(353.55)	2.0	(250.00)	0.01	98.53
2.0	(250.00)	2.5	(176.78)	0	98.52
2.5	(176.78)	3.0	(125.00)	0.21	98.52
3.0	(125.00)	3.5	(88.39)	1.09	98.31
3.5	(88.39)	4.0	(62.50)	3.07	97.22
4.0	(62.50)	4.5	(44.19)	6.08	94.15
4.5	(44.19)	5.0	(31.25)	9.09	88.06
5.0	(31.25)	5.5	(22.10)	10.82	78.97
5.5	(22.10)	6.0	(15.63)	10.93	68.15
6.0	(15.63)	6.5	(11.05)	10.01	57.22
6.5	(11.05)	7.0	(7.81)	8.8	47.22
7.0	(7.81)	7.5	(5.52)	7.73	38.42
7.5	(5.52)	8.0	(3.90)	6.88	30.69

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.11	23.81
8.5	(2.76)	9.0	(1.95)	5.32	17.7
9.0	(1.95)	9.5	(1.38)	4.46	12.38
9.5	(1.38)	10.0	(0.98)	3.49	7.92
10.0	(0.98)	10.5	(0.69)	2.43	4.43
10.5	(0.69)	11.0	(0.49)	1.4	2.01
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:35:21 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.60

D[4,3] = 28.71um = 5.12phi
D[v,0.05] = 1.04um = 9.9phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 12.28um = 6.35phi
D[v,0.84] = 36.93um = 4.76phi
D[v,0.95] = 64.55um = 3.95phi

Kurtosis = 99.35
Skewness = 9.44
Standard Deviation = 94.32 um = 3.41phi

Inclusive SD (Sorting Coeff.) = 1.87 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

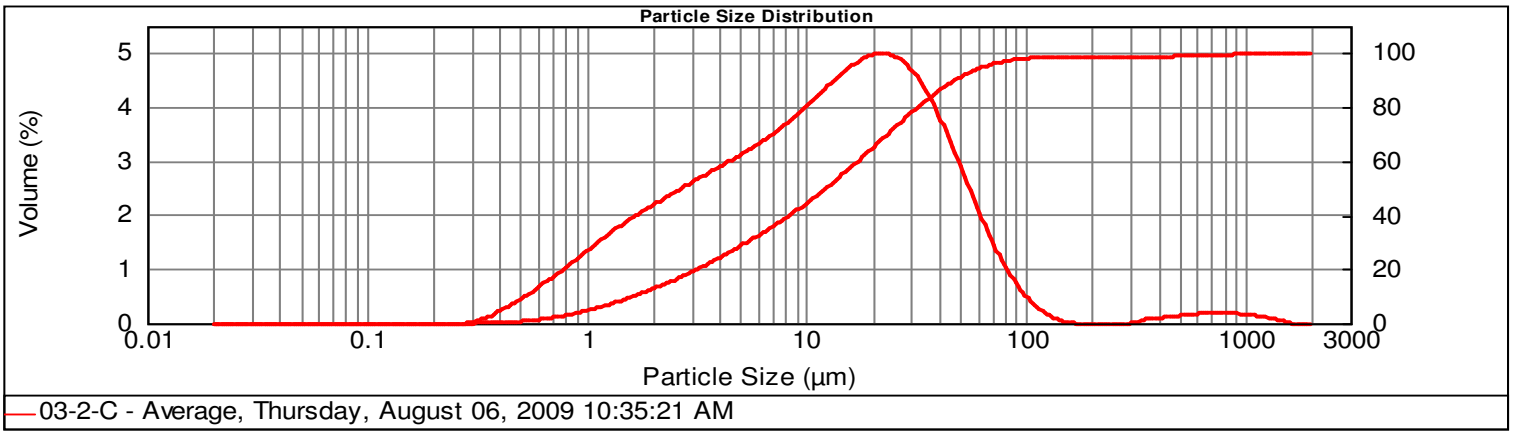
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.58 phi (Silt)

USGS
% Clay (0-2 um) = 12.66
% Fine Silt (2-3.9 um) = 11

d (0.1) : 1.643 **um**
d (0.5) : 12.281 **d (0.9) : 47.450**

Wentworth
% Clay (0-3.9 um) = 23.66
% Silt (3.91-31 um) = 55.31
% Coarse Silt (31 - 62.5 um) = 15.63
% Very Fine sand (62.5 - 125 um) = 3.95

% Fine sand (125-250 um) = .1
% Medium sand (250-500 um) = .27
% Coarse sand (500-1000 um) = .8
% Very Coarse sand (1000 - 2000 um) = .29



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.02	100
-0.5	(1414.21)	0.0	(1000.00)	0.27	99.98
0.0	(1000.00)	0.5	(707.10)	0.42	99.71
0.5	(707.10)	1.0	(500.00)	0.38	99.29
1.0	(500.00)	1.5	(353.55)	0.24	98.91
1.5	(353.55)	2.0	(250.00)	0.03	98.68
2.0	(250.00)	2.5	(176.78)	0	98.65
2.5	(176.78)	3.0	(125.00)	0.1	98.65
3.0	(125.00)	3.5	(88.39)	0.95	98.55
3.5	(88.39)	4.0	(62.50)	3	97.59
4.0	(62.50)	4.5	(44.19)	6.13	94.6
4.5	(44.19)	5.0	(31.25)	9.25	88.47
5.0	(31.25)	5.5	(22.10)	11.02	79.21
5.5	(22.10)	6.0	(15.63)	11.07	68.2
6.0	(15.63)	6.5	(11.05)	10.06	57.13
6.5	(11.05)	7.0	(7.81)	8.8	47.06
7.0	(7.81)	7.5	(5.52)	7.72	38.26
7.5	(5.52)	8.0	(3.90)	6.85	30.54
8.0	(3.90)	8.5	(2.76)	6.08	23.69
8.5	(2.76)	9.0	(1.95)	5.29	17.61
9.0	(1.95)	9.5	(1.38)	4.44	12.33
9.5	(1.38)	10.0	(0.98)	3.47	7.89
10.0	(0.98)	10.5	(0.69)	2.42	4.42
10.5	(0.69)	11.0	(0.49)	1.4	2
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:40:07 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.09

D[4,3] = 30.28um = 5.05phi
D[v,0.05] = 1.06um = 9.89phi
D[v,0.16] = 2.57um = 8.61phi

D[v,0.5] = 12.96um = 6.27phi
D[v,0.84] = 40.15um = 4.64phi
D[v,0.95] = 75.85um = 3.72phi

Kurtosis = 91.29
Skewness = 8.86
Standard Deviation = 87.65 um = 3.51phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

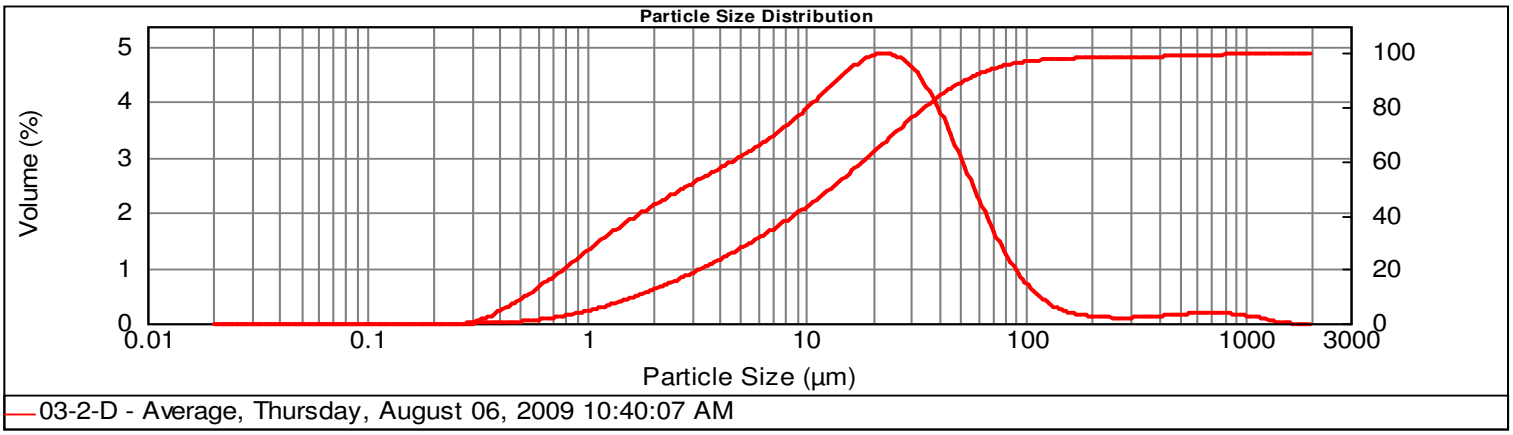
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 12.34
% Fine Silt (2-3.9 um) = 10.67

d (0.1) : 1.676 **um**
d (0.5) : 12.958 **d (0.9) : 52.756**

Wentworth
% Clay (0-3.9 um) = 23
% Silt (3.91-31 um) = 53.8
% Coarse Silt (31 - 62.5 um) = 15.94
% Very Fine sand (62.5 - 125 um) = 4.94

% Fine sand (125-250 um) = .8
% Medium sand (250-500 um) = .54
% Coarse sand (500-1000 um) = .78
% Very Coarse sand (1000 - 2000 um) = .2



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.19	100
0.0	(1000.00)	0.5	(707.10)	0.38	99.8
0.5	(707.10)	1.0	(500.00)	0.4	99.42
1.0	(500.00)	1.5	(353.55)	0.3	99.02
1.5	(353.55)	2.0	(250.00)	0.23	98.71
2.0	(250.00)	2.5	(176.78)	0.27	98.48
2.5	(176.78)	3.0	(125.00)	0.54	98.22
3.0	(125.00)	3.5	(88.39)	1.46	97.68
3.5	(88.39)	4.0	(62.50)	3.47	96.22
4.0	(62.50)	4.5	(44.19)	6.42	92.74
4.5	(44.19)	5.0	(31.25)	9.28	86.32
5.0	(31.25)	5.5	(22.10)	10.83	77.04
5.5	(22.10)	6.0	(15.63)	10.78	66.21
6.0	(15.63)	6.5	(11.05)	9.76	55.42
6.5	(11.05)	7.0	(7.81)	8.52	45.67
7.0	(7.81)	7.5	(5.52)	7.47	37.14
7.5	(5.52)	8.0	(3.90)	6.64	29.67
8.0	(3.90)	8.5	(2.76)	5.89	23.03
8.5	(2.76)	9.0	(1.95)	5.13	17.14
9.0	(1.95)	9.5	(1.38)	4.32	12.01
9.5	(1.38)	10.0	(0.98)	3.38	7.7
10.0	(0.98)	10.5	(0.69)	2.36	4.31
10.5	(0.69)	11.0	(0.49)	1.37	1.95
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:44:29 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.53

D[4,3] = 32.03um = 4.96phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 13.07um = 6.26phi
D[v,0.84] = 40.45um = 4.63phi
D[v,0.95] = 74.4um = 3.75phi

Kurtosis = 98.76
Skewness = 9.31
Standard Deviation = 105.38 um = 3.25phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

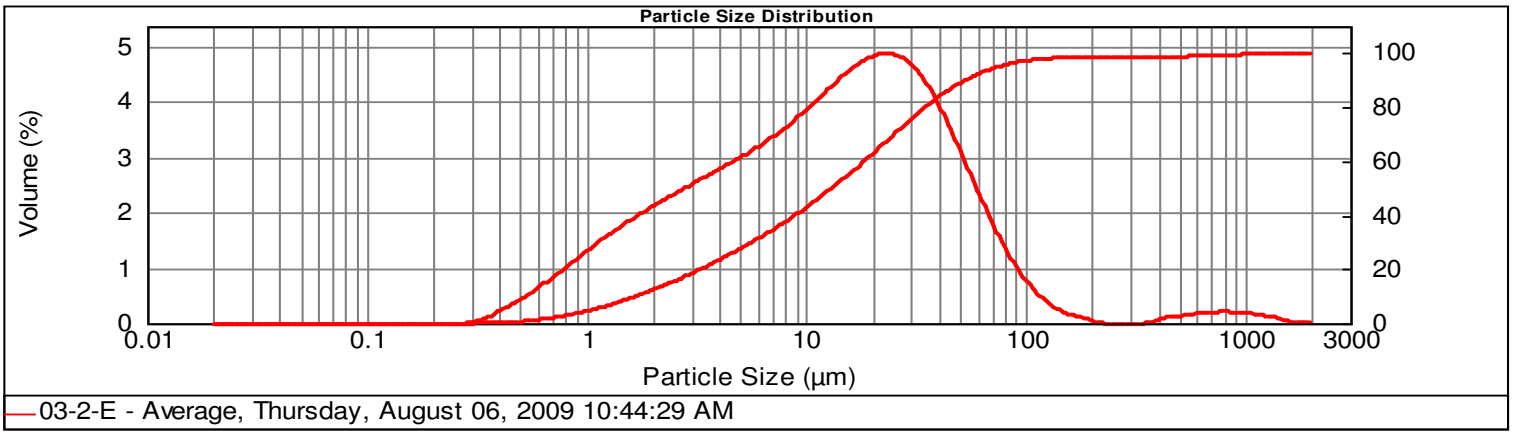
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 12.28
% Fine Silt (2-3.9 um) = 10.63

d (0.1) : 1.683 **um**
d (0.5) : 13.070 **d (0.9) : 52.857**

Wentworth
% Clay (0-3.9 um) = 22.91
% Silt (3.91-31 um) = 53.62
% Coarse Silt (31 - 62.5 um) = 16.29
% Very Fine sand (62.5 - 125 um) = 5.23

% Fine sand (125-250 um) = .56
% Medium sand (250-500 um) = .17
% Coarse sand (500-1000 um) = .83
% Very Coarse sand (1000 - 2000 um) = .39



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.07	100
-0.5	(1414.21)	0.0	(1000.00)	0.32	99.93
0.0	(1000.00)	0.5	(707.10)	0.45	99.61
0.5	(707.10)	1.0	(500.00)	0.38	99.16
1.0	(500.00)	1.5	(353.55)	0.17	98.78
1.5	(353.55)	2.0	(250.00)	0	98.6
2.0	(250.00)	2.5	(176.78)	0.08	98.6
2.5	(176.78)	3.0	(125.00)	0.48	98.52
3.0	(125.00)	3.5	(88.39)	1.55	98.05
3.5	(88.39)	4.0	(62.50)	3.68	96.5
4.0	(62.50)	4.5	(44.19)	6.64	92.82
4.5	(44.19)	5.0	(31.25)	9.42	86.18
5.0	(31.25)	5.5	(22.10)	10.87	76.77
5.5	(22.10)	6.0	(15.63)	10.75	65.9
6.0	(15.63)	6.5	(11.05)	9.7	55.15
6.5	(11.05)	7.0	(7.81)	8.47	45.45
7.0	(7.81)	7.5	(5.52)	7.44	36.98
7.5	(5.52)	8.0	(3.90)	6.61	29.55
8.0	(3.90)	8.5	(2.76)	5.87	22.93
8.5	(2.76)	9.0	(1.95)	5.11	17.07
9.0	(1.95)	9.5	(1.38)	4.3	11.95
9.5	(1.38)	10.0	(0.98)	3.37	7.65
10.0	(0.98)	10.5	(0.69)	2.35	4.28
10.5	(0.69)	11.0	(0.49)	1.36	1.93
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:48:59 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.25

D[4,3] = 36.18um = 4.79phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.61um = 8.58phi

D[v,0.5] = 13.26um = 6.24phi
D[v,0.84] = 40.69um = 4.62phi
D[v,0.95] = 79.02um = 3.66phi

Kurtosis = 75.58
Skewness = 8.08
Standard Deviation = 118.59 um = 3.08phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .93 phi (Mesokurtic)

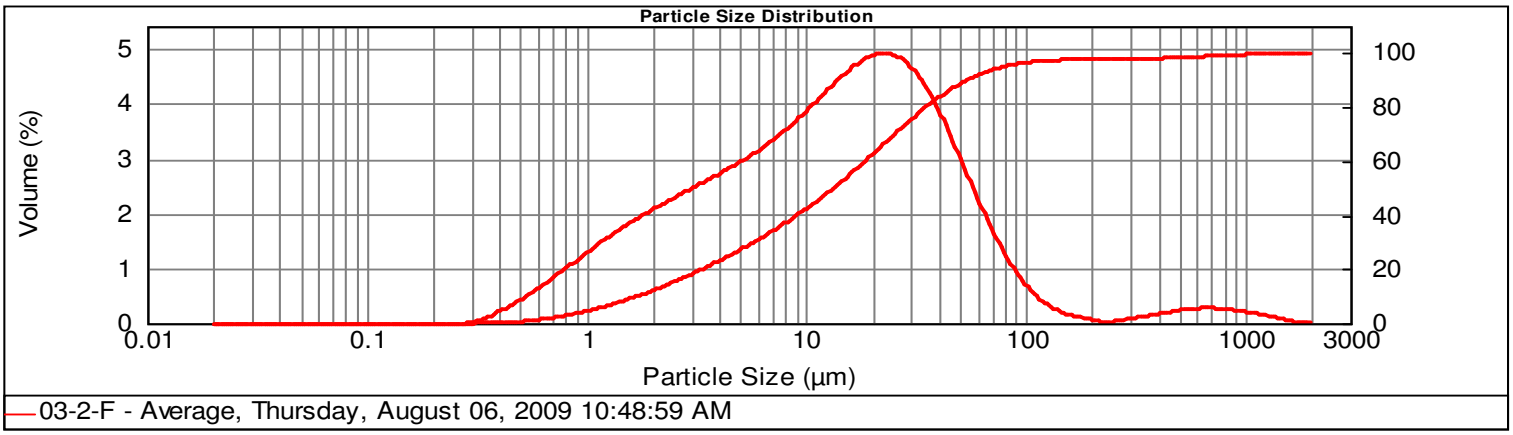
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.48 phi (Silt)

USGS
% Clay (0-2 um) = 12.16
% Fine Silt (2-3.9 um) = 10.44

d (0.1) : 1.694 **um**
d (0.5) : 13.260 **d (0.9) : 53.748**

Wentworth
% Clay (0-3.9 um) = 22.6
% Silt (3.91-31 um) = 53.83
% Coarse Silt (31 - 62.5 um) = 15.97
% Very Fine sand (62.5 - 125 um) = 4.84

% Fine sand (125-250 um) = .56
% Medium sand (250-500 um) = .6
% Coarse sand (500-1000 um) = 1.17
% Very Coarse sand (1000 - 2000 um) = .44



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.09	100
-0.5	(1414.21)	0.0	(1000.00)	0.35	99.91
0.0	(1000.00)	0.5	(707.10)	0.57	99.56
0.5	(707.10)	1.0	(500.00)	0.6	98.99
1.0	(500.00)	1.5	(353.55)	0.41	98.39
1.5	(353.55)	2.0	(250.00)	0.19	97.98
2.0	(250.00)	2.5	(176.78)	0.12	97.79
2.5	(176.78)	3.0	(125.00)	0.44	97.68
3.0	(125.00)	3.5	(88.39)	1.41	97.24
3.5	(88.39)	4.0	(62.50)	3.44	95.83
4.0	(62.50)	4.5	(44.19)	6.41	92.4
4.5	(44.19)	5.0	(31.25)	9.32	85.99
5.0	(31.25)	5.5	(22.10)	10.94	76.67
5.5	(22.10)	6.0	(15.63)	10.91	65.73
6.0	(15.63)	6.5	(11.05)	9.83	54.82
6.5	(11.05)	7.0	(7.81)	8.5	44.99
7.0	(7.81)	7.5	(5.52)	7.37	36.5
7.5	(5.52)	8.0	(3.90)	6.5	29.13

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.76	22.62
8.5	(2.76)	9.0	(1.95)	5.03	16.86
9.0	(1.95)	9.5	(1.38)	4.24	11.84
9.5	(1.38)	10.0	(0.98)	3.34	7.6
10.0	(0.98)	10.5	(0.69)	2.33	4.26
10.5	(0.69)	11.0	(0.49)	1.35	1.93
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:54:15 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.81

D[4,3] = 29um = 5.11phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 13.22um = 6.24phi
D[v,0.84] = 39.23um = 4.67phi
D[v,0.95] = 70.42um = 3.83phi

Kurtosis = 101.98
Skewness = 9.28
Standard Deviation = 82.55 um = 3.6phi

Inclusive SD (Sorting Coeff.) = 1.89 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

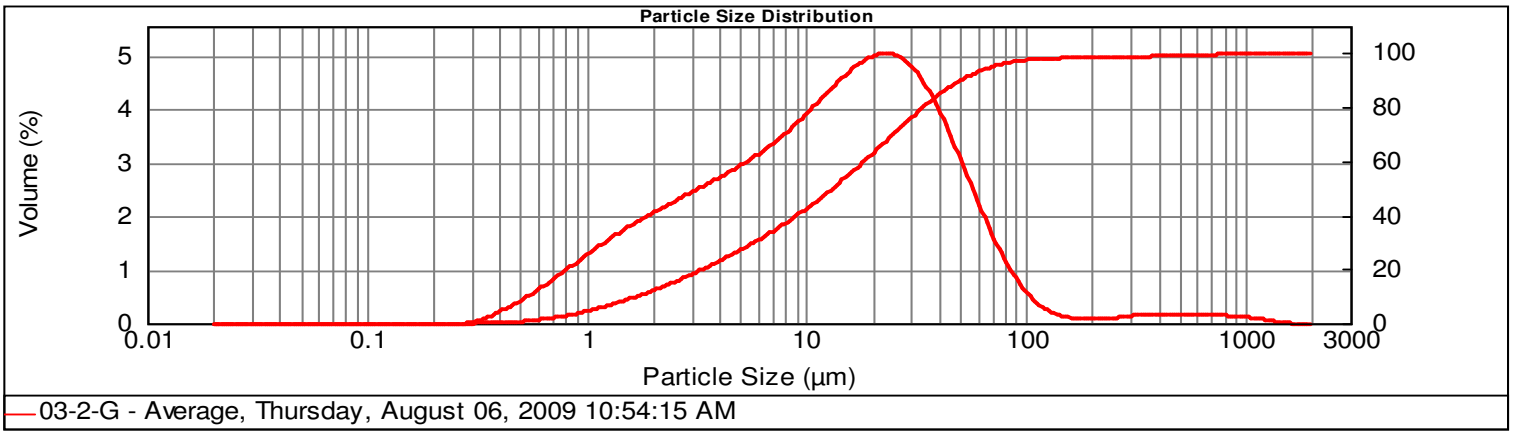
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 12.07
% Fine Silt (2-3.9 um) = 10.39

d (0.1) : 1.705 **um**
d (0.5) : 13.218 **d (0.9) : 50.673**

Wentworth
% Clay (0-3.9 um) = 22.46
% Silt (3.91-31 um) = 54.68
% Coarse Silt (31 - 62.5 um) = 16.4
% Very Fine sand (62.5 - 125 um) = 4.46

% Fine sand (125-250 um) = .5
% Medium sand (250-500 um) = .66
% Coarse sand (500-1000 um) = .67
% Very Coarse sand (1000 - 2000 um) = .17



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.17	100
0.0	(1000.00)	0.5	(707.10)	0.31	99.83
0.5	(707.10)	1.0	(500.00)	0.36	99.52
1.0	(500.00)	1.5	(353.55)	0.36	99.16
1.5	(353.55)	2.0	(250.00)	0.3	98.8
2.0	(250.00)	2.5	(176.78)	0.19	98.5
2.5	(176.78)	3.0	(125.00)	0.31	98.31
3.0	(125.00)	3.5	(88.39)	1.16	98
3.5	(88.39)	4.0	(62.50)	3.3	96.84
4.0	(62.50)	4.5	(44.19)	6.53	93.54
4.5	(44.19)	5.0	(31.25)	9.62	87.01
5.0	(31.25)	5.5	(22.10)	11.26	77.39
5.5	(22.10)	6.0	(15.63)	11.14	66.13
6.0	(15.63)	6.5	(11.05)	9.98	54.99
6.5	(11.05)	7.0	(7.81)	8.6	45.01
7.0	(7.81)	7.5	(5.52)	7.42	36.41
7.5	(5.52)	8.0	(3.90)	6.51	28.99
8.0	(3.90)	8.5	(2.76)	5.74	22.49
8.5	(2.76)	9.0	(1.95)	5	16.75
9.0	(1.95)	9.5	(1.38)	4.22	11.75
9.5	(1.38)	10.0	(0.98)	3.32	7.53
10.0	(0.98)	10.5	(0.69)	2.31	4.22
10.5	(0.69)	11.0	(0.49)	1.34	1.9
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 10:59:14 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.53

D[4,3] = 36.27um = 4.79phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.65um = 8.56phi

D[v,0.5] = 13.81um = 6.18phi
D[v,0.84] = 41.34um = 4.6phi
D[v,0.95] = 78.25um = 3.68phi

Kurtosis = 88.49
Skewness = 8.76
Standard Deviation = 122.3 um = 3.03phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .93 phi (Mesokurtic)

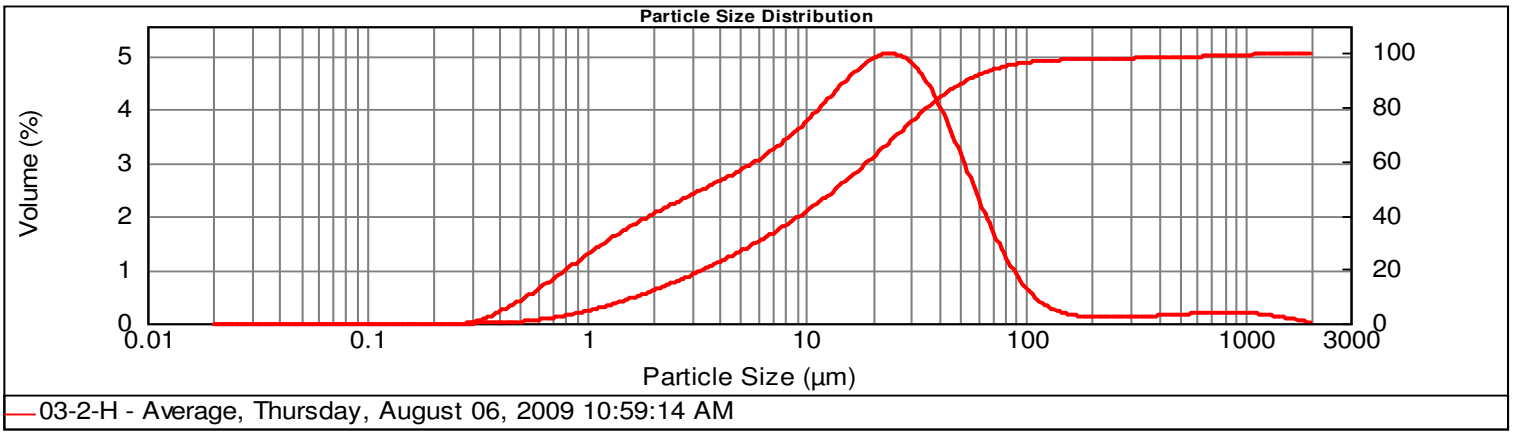
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 12.02
% Fine Silt (2-3.9 um) = 10.18

d (0.1) : 1.708 **um**
d (0.5) : 13.808 **d (0.9) : 53.995**

Wentworth
% Clay (0-3.9 um) = 22.21
% Silt (3.91-31 um) = 53.42
% Coarse Silt (31 - 62.5 um) = 16.79
% Very Fine sand (62.5 - 125 um) = 4.83

% Fine sand (125-250 um) = .73
% Medium sand (250-500 um) = .62
% Coarse sand (500-1000 um) = .88
% Very Coarse sand (1000 - 2000 um) = .53



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.16	100
-0.5	(1414.21)	0.0	(1000.00)	0.37	99.84
0.0	(1000.00)	0.5	(707.10)	0.46	99.47
0.5	(707.10)	1.0	(500.00)	0.42	99.01
1.0	(500.00)	1.5	(353.55)	0.33	98.59
1.5	(353.55)	2.0	(250.00)	0.29	98.26
2.0	(250.00)	2.5	(176.78)	0.28	97.98
2.5	(176.78)	3.0	(125.00)	0.45	97.69
3.0	(125.00)	3.5	(88.39)	1.33	97.24
3.5	(88.39)	4.0	(62.50)	3.49	95.91
4.0	(62.50)	4.5	(44.19)	6.74	92.42
4.5	(44.19)	5.0	(31.25)	9.8	85.68
5.0	(31.25)	5.5	(22.10)	11.29	75.88
5.5	(22.10)	6.0	(15.63)	10.97	64.59
6.0	(15.63)	6.5	(11.05)	9.67	53.62
6.5	(11.05)	7.0	(7.81)	8.26	43.95
7.0	(7.81)	7.5	(5.52)	7.14	35.68
7.5	(5.52)	8.0	(3.90)	6.31	28.54

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.61	22.23
8.5	(2.76)	9.0	(1.95)	4.92	16.63
9.0	(1.95)	9.5	(1.38)	4.17	11.71
9.5	(1.38)	10.0	(0.98)	3.3	7.54
10.0	(0.98)	10.5	(0.69)	2.32	4.24
10.5	(0.69)	11.0	(0.49)	1.35	1.93
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 11:44:07 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.68

D[4,3] = 25.75um = 5.28phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.73um = 8.52phi

D[v,0.5] = 14.65um = 6.09phi
D[v,0.84] = 43.22um = 4.53phi
D[v,0.95] = 76.92um = 3.7phi

Kurtosis = 39.48
Skewness = 5.33
Standard Deviation = 40.47 um = 4.63phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

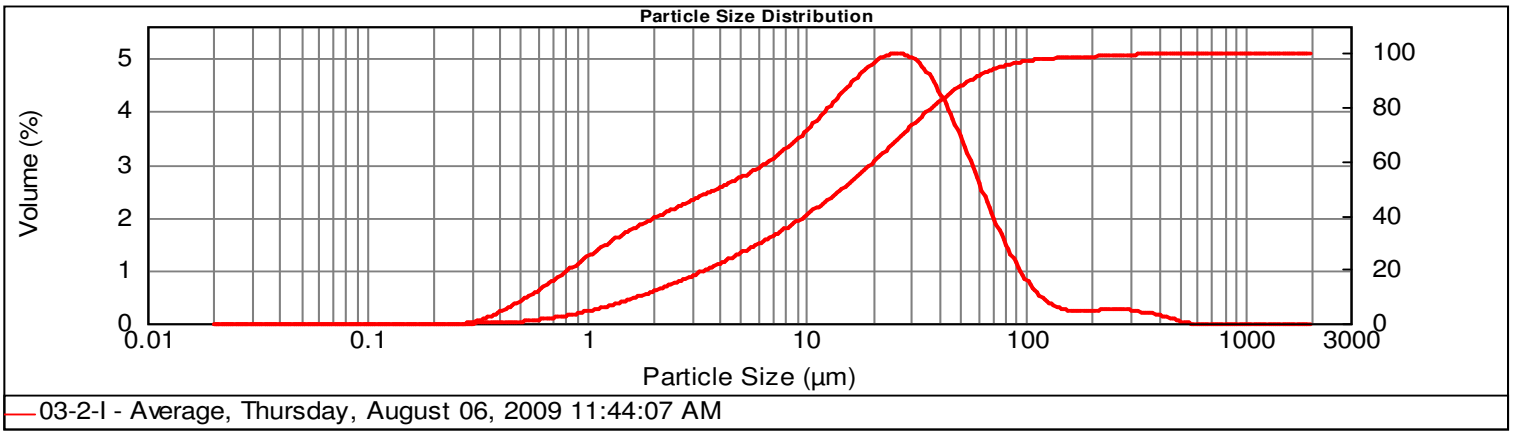
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 11.72
% Fine Silt (2-3.9 um) = 9.84

d (0.1) : 1.743 **um**
d (0.5) : 14.648 **d (0.9) : 55.655**

Wentworth
% Clay (0-3.9 um) = 21.56
% Silt (3.91-31 um) = 52.38
% Coarse Silt (31 - 62.5 um) = 18.2
% Very Fine sand (62.5 - 125 um) = 5.82

% Fine sand (125-250 um) = 1.19
% Medium sand (250-500 um) = .84
% Coarse sand (500-1000 um) = .01
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0.01	100
1.0	(500.00)	1.5	(353.55)	0.3	99.99
1.5	(353.55)	2.0	(250.00)	0.54	99.69
2.0	(250.00)	2.5	(176.78)	0.56	99.15
2.5	(176.78)	3.0	(125.00)	0.63	98.6
3.0	(125.00)	3.5	(88.39)	1.67	97.96
3.5	(88.39)	4.0	(62.50)	4.15	96.29
4.0	(62.50)	4.5	(44.19)	7.54	92.14
4.5	(44.19)	5.0	(31.25)	10.4	84.6
5.0	(31.25)	5.5	(22.10)	11.48	74.2
5.5	(22.10)	6.0	(15.63)	10.85	62.72
6.0	(15.63)	6.5	(11.05)	9.39	51.87
6.5	(11.05)	7.0	(7.81)	7.95	42.47
7.0	(7.81)	7.5	(5.52)	6.86	34.52
7.5	(5.52)	8.0	(3.90)	6.08	27.66
8.0	(3.90)	8.5	(2.76)	5.42	21.59
8.5	(2.76)	9.0	(1.95)	4.76	16.17
9.0	(1.95)	9.5	(1.38)	4.05	11.41
9.5	(1.38)	10.0	(0.98)	3.22	7.36
10.0	(0.98)	10.5	(0.69)	2.26	4.15
10.5	(0.69)	11.0	(0.49)	1.32	1.88
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 03-2-J - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 11:48:49 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.61

D[4,3] = 23.72um = 5.4phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.6um = 8.59phi

D[v,0.5] = 13.8um = 6.18phi
D[v,0.84] = 39.61um = 4.66phi
D[v,0.95] = 66.06um = 3.92phi

Kurtosis = 100.53
Skewness = 8.77
Standard Deviation = 44.79 um = 4.48phi

Inclusive SD (Sorting Coeff.) = 1.89 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

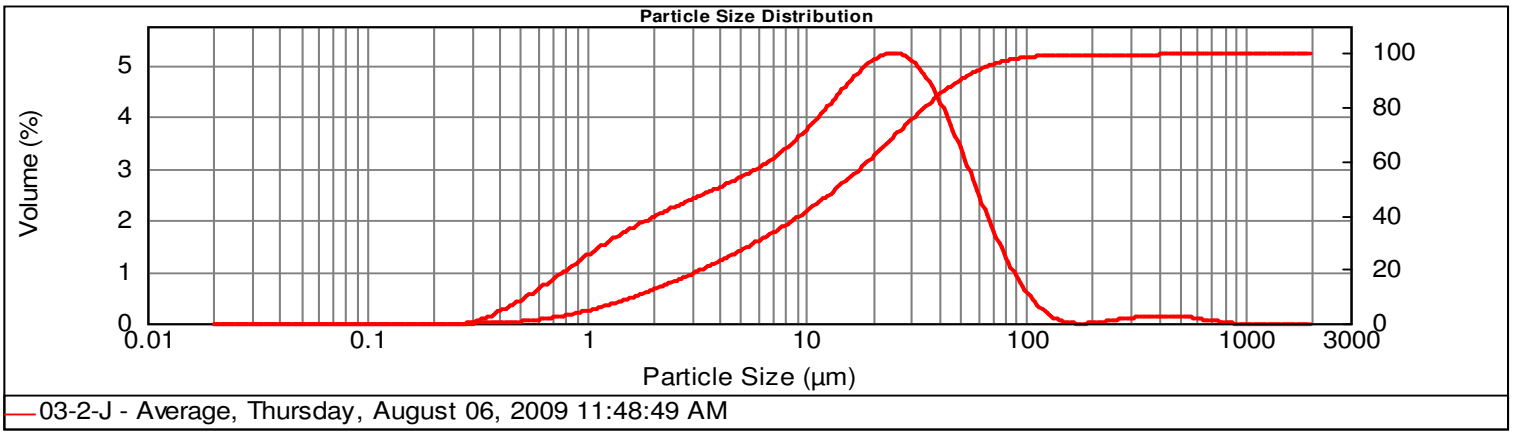
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 12.28
% Fine Silt (2-3.9 um) = 10.18

d (0.1) : 1.675 **um**
d (0.5) : 13.801 **d (0.9) : 50.064**

Wentworth
% Clay (0-3.9 um) = 22.47
% Silt (3.91-31 um) = 53.92
% Coarse Silt (31 - 62.5 um) = 17.8
% Very Fine sand (62.5 - 125 um) = 4.87

% Fine sand (125-250 um) = .15
% Medium sand (250-500 um) = .55
% Coarse sand (500-1000 um) = .25
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0.03	100
0.5	(707.10)	1.0	(500.00)	0.22	99.97
1.0	(500.00)	1.5	(353.55)	0.32	99.75
1.5	(353.55)	2.0	(250.00)	0.22	99.43
2.0	(250.00)	2.5	(176.78)	0.04	99.2
2.5	(176.78)	3.0	(125.00)	0.11	99.17
3.0	(125.00)	3.5	(88.39)	1.19	99.06
3.5	(88.39)	4.0	(62.50)	3.68	97.87
4.0	(62.50)	4.5	(44.19)	7.2	94.19
4.5	(44.19)	5.0	(31.25)	10.34	86.99
5.0	(31.25)	5.5	(22.10)	11.74	76.65
5.5	(22.10)	6.0	(15.63)	11.24	64.91
6.0	(15.63)	6.5	(11.05)	9.73	53.68
6.5	(11.05)	7.0	(7.81)	8.18	43.94
7.0	(7.81)	7.5	(5.52)	7.03	35.76
7.5	(5.52)	8.0	(3.90)	6.24	28.73
8.0	(3.90)	8.5	(2.76)	5.59	22.49
8.5	(2.76)	9.0	(1.95)	4.94	16.91
9.0	(1.95)	9.5	(1.38)	4.22	11.97
9.5	(1.38)	10.0	(0.98)	3.36	7.75
10.0	(0.98)	10.5	(0.69)	2.38	4.39
10.5	(0.69)	11.0	(0.49)	1.39	2.01
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:24:06 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.13

D[4,3] = 46.97um = 4.41phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.37um = 8.72phi

D[v,0.5] = 12.08um = 6.37phi
D[v,0.84] = 41.97um = 4.57phi
D[v,0.95] = 95.67um = 3.39phi

Kurtosis = 49.31
Skewness = 6.72
Standard Deviation = 167.95 um = 2.57phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

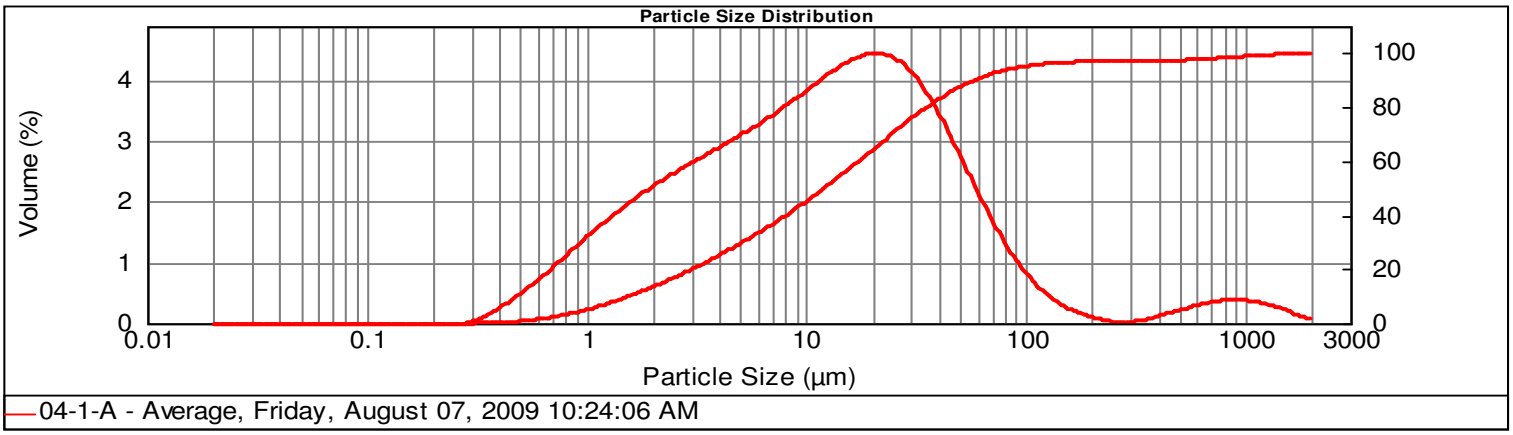
Inclusive Skewness = -0.11 (Coarse Skewed)
Inclusive Mean = 6.56 phi (Silt)

USGS
% Clay (0-2 um) = 13.43
% Fine Silt (2-3.9 um) = 11.23

d (0.1) : 1.563 **um**
d (0.5) : 12.081 **d (0.9) : 58.228**

Wentworth
% Clay (0-3.9 um) = 24.66
% Silt (3.91-31 um) = 51.94
% Coarse Silt (31 - 62.5 um) = 14.4
% Very Fine sand (62.5 - 125 um) = 5.18

% Fine sand (125-250 um) = .84
% Medium sand (250-500 um) = .38
% Coarse sand (500-1000 um) = 1.5
% Very Coarse sand (1000 - 2000 um) = 1.1



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.36	100
-0.5	(1414.21)	0.0	(1000.00)	0.74	99.64
0.0	(1000.00)	0.5	(707.10)	0.85	98.9
0.5	(707.10)	1.0	(500.00)	0.65	98.04
1.0	(500.00)	1.5	(353.55)	0.31	97.39
1.5	(353.55)	2.0	(250.00)	0.07	97.08
2.0	(250.00)	2.5	(176.78)	0.19	97.01
2.5	(176.78)	3.0	(125.00)	0.65	96.83
3.0	(125.00)	3.5	(88.39)	1.69	96.17
3.5	(88.39)	4.0	(62.50)	3.49	94.48
4.0	(62.50)	4.5	(44.19)	5.9	91
4.5	(44.19)	5.0	(31.25)	8.29	85.1
5.0	(31.25)	5.5	(22.10)	9.76	76.81
5.5	(22.10)	6.0	(15.63)	10	67.05
6.0	(15.63)	6.5	(11.05)	9.39	57.05
6.5	(11.05)	7.0	(7.81)	8.49	47.66
7.0	(7.81)	7.5	(5.52)	7.62	39.17
7.5	(5.52)	8.0	(3.90)	6.86	31.55

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.16	24.69
8.5	(2.76)	9.0	(1.95)	5.44	18.52
9.0	(1.95)	9.5	(1.38)	4.63	13.08
9.5	(1.38)	10.0	(0.98)	3.67	8.45
10.0	(0.98)	10.5	(0.69)	2.58	4.79
10.5	(0.69)	11.0	(0.49)	1.52	2.2
11.0	(0.49)	11.5	(0.35)	0.62	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:28:32 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.14

D[4,3] = 54.25um = 4.2phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 12.85um = 6.28phi
D[v,0.84] = 42.33um = 4.56phi
D[v,0.95] = 109.62um = 3.19phi

Kurtosis = 39.09
Skewness = 6.06
Standard Deviation = 192.61 um = 2.38phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .99 phi (Mesokurtic)

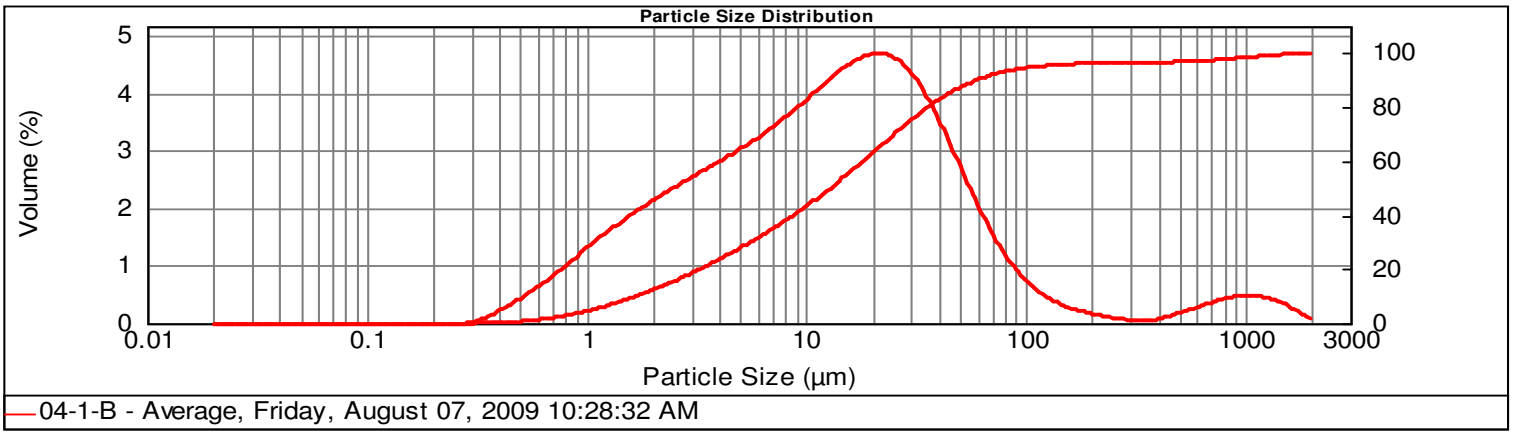
Inclusive Skewness = -0.11 (Coarse Skewed)
Inclusive Mean = 6.48 phi (Silt)

USGS
% Clay (0-2 um) = 12.36
% Fine Silt (2-3.9 um) = 10.75

d (0.1) : 1.675 um
d (0.5) : 12.852
d (0.9) : 59.232

Wentworth
% Clay (0-3.9 um) = 23.11
% Silt (3.91-31 um) = 53.04
% Coarse Silt (31 - 62.5 um) = 14.56
% Very Fine sand (62.5 - 125 um) = 4.74

% Fine sand (125-250 um) = 1.04
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = 1.61
% Very Coarse sand (1000 - 2000 um) = 1.55



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.54	100
-0.5	(1414.21)	0.0	(1000.00)	1.01	99.46
0.0	(1000.00)	0.5	(707.10)	0.99	98.45
0.5	(707.10)	1.0	(500.00)	0.62	97.45
1.0	(500.00)	1.5	(353.55)	0.22	96.84
1.5	(353.55)	2.0	(250.00)	0.13	96.62
2.0	(250.00)	2.5	(176.78)	0.33	96.48
2.5	(176.78)	3.0	(125.00)	0.71	96.15
3.0	(125.00)	3.5	(88.39)	1.53	95.45
3.5	(88.39)	4.0	(62.50)	3.2	93.91
4.0	(62.50)	4.5	(44.19)	5.79	90.71
4.5	(44.19)	5.0	(31.25)	8.55	84.92
5.0	(31.25)	5.5	(22.10)	10.28	76.37
5.5	(22.10)	6.0	(15.63)	10.5	66.09
6.0	(15.63)	6.5	(11.05)	9.68	55.59
6.5	(11.05)	7.0	(7.81)	8.55	45.91
7.0	(7.81)	7.5	(5.52)	7.53	37.36
7.5	(5.52)	8.0	(3.90)	6.69	29.82

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.94	23.14
8.5	(2.76)	9.0	(1.95)	5.17	17.2
9.0	(1.95)	9.5	(1.38)	4.34	12.03
9.5	(1.38)	10.0	(0.98)	3.39	7.69
10.0	(0.98)	10.5	(0.69)	2.35	4.31
10.5	(0.69)	11.0	(0.49)	1.36	1.95
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:32:49 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.81

D[4,3] = 40.47um = 4.63phi
D[v,0.05] = 1.04um = 9.9phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 12.25um = 6.35phi
D[v,0.84] = 40.44um = 4.63phi
D[v,0.95] = 95.49um = 3.39phi

Kurtosis = 66.79
Skewness = 7.63
Standard Deviation = 138.43 um = 2.85phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .96 phi (Mesokurtic)

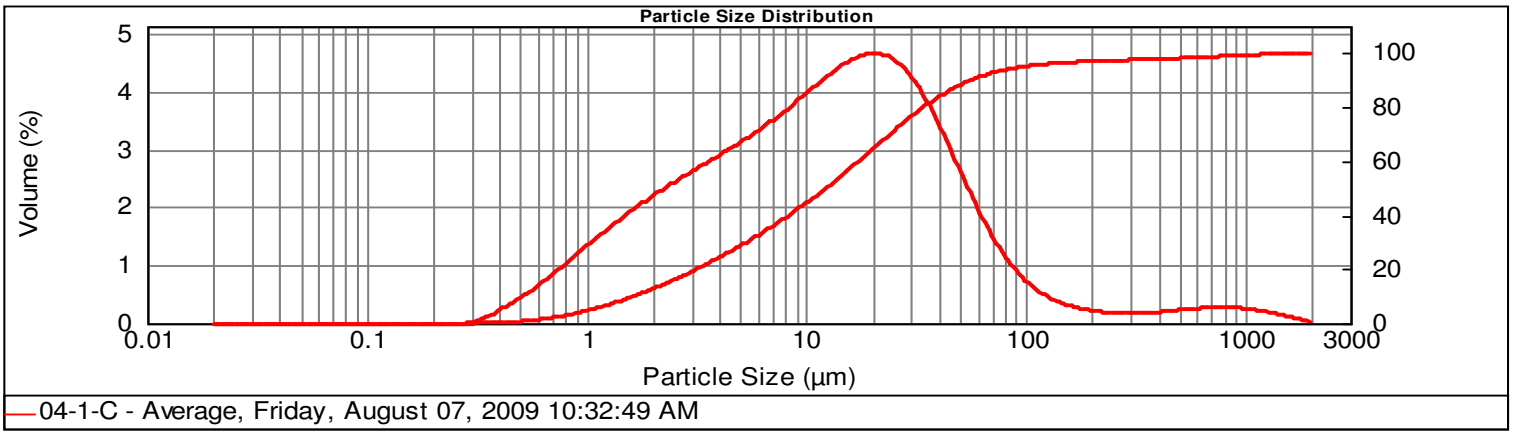
Inclusive Skewness = -0.12 (Coarse Skewed)
Inclusive Mean = 6.54 phi (Silt)

USGS
% Clay (0-2 um) = 12.69
% Fine Silt (2-3.9 um) = 11.09

d (0.1) : 1.642 **um**
d (0.5) : 12.247 **d (0.9) : 55.983**

Wentworth
% Clay (0-3.9 um) = 23.77
% Silt (3.91-31 um) = 53.58
% Coarse Silt (31 - 62.5 um) = 14.12
% Very Fine sand (62.5 - 125 um) = 4.61

% Fine sand (125-250 um) = 1.24
% Medium sand (250-500 um) = .83
% Coarse sand (500-1000 um) = 1.18
% Very Coarse sand (1000 - 2000 um) = .67



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.47	99.79
0.0	(1000.00)	0.5	(707.10)	0.61	99.33
0.5	(707.10)	1.0	(500.00)	0.58	98.72
1.0	(500.00)	1.5	(353.55)	0.45	98.15
1.5	(353.55)	2.0	(250.00)	0.38	97.69
2.0	(250.00)	2.5	(176.78)	0.47	97.32
2.5	(176.78)	3.0	(125.00)	0.77	96.85
3.0	(125.00)	3.5	(88.39)	1.52	96.08
3.5	(88.39)	4.0	(62.50)	3.09	94.56
4.0	(62.50)	4.5	(44.19)	5.58	91.47
4.5	(44.19)	5.0	(31.25)	8.32	85.89
5.0	(31.25)	5.5	(22.10)	10.12	77.57
5.5	(22.10)	6.0	(15.63)	10.47	67.45
6.0	(15.63)	6.5	(11.05)	9.79	56.99
6.5	(11.05)	7.0	(7.81)	8.75	47.19
7.0	(7.81)	7.5	(5.52)	7.75	38.44
7.5	(5.52)	8.0	(3.90)	6.89	30.69

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.12	23.8
8.5	(2.76)	9.0	(1.95)	5.33	17.68
9.0	(1.95)	9.5	(1.38)	4.46	12.35
9.5	(1.38)	10.0	(0.98)	3.48	7.88
10.0	(0.98)	10.5	(0.69)	2.41	4.41
10.5	(0.69)	11.0	(0.49)	1.39	2
11.0	(0.49)	11.5	(0.35)	0.55	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:37:13 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.59

D[4,3] = 37.14um = 4.75phi
D[v,0.05] = 1.04um = 9.92phi
D[v,0.16] = 2.44um = 8.68phi

D[v,0.5] = 11.72um = 6.41phi
D[v,0.84] = 38.84um = 4.69phi
D[v,0.95] = 83.73um = 3.58phi

Kurtosis = 73.89
Skewness = 8.02
Standard Deviation = 129.62 um = 2.95phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

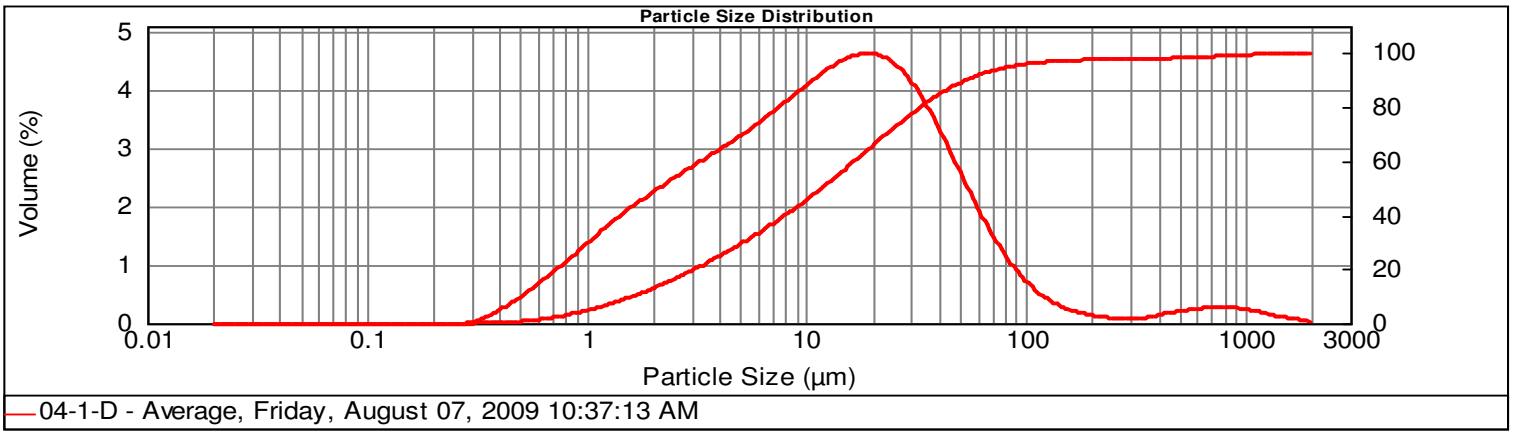
Inclusive Skewness = -0.12 (Coarse Skewed)
Inclusive Mean = 6.59 phi (Silt)

USGS
% Clay (0-2 um) = 12.92
% Fine Silt (2-3.9 um) = 11.34

d (0.1) : 1.620 **um**
d (0.5) : 11.720 **d (0.9) : 53.163**

Wentworth
% Clay (0-3.9 um) = 24.27
% Silt (3.91-31 um) = 54.17
% Coarse Silt (31 - 62.5 um) = 13.81
% Very Fine sand (62.5 - 125 um) = 4.6

% Fine sand (125-250 um) = .9
% Medium sand (250-500 um) = .53
% Coarse sand (500-1000 um) = 1.16
% Very Coarse sand (1000 - 2000 um) = .57



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.16	100
-0.5	(1414.21)	0.0	(1000.00)	0.41	99.84
0.0	(1000.00)	0.5	(707.10)	0.6	99.43
0.5	(707.10)	1.0	(500.00)	0.55	98.83
1.0	(500.00)	1.5	(353.55)	0.35	98.27
1.5	(353.55)	2.0	(250.00)	0.19	97.93
2.0	(250.00)	2.5	(176.78)	0.28	97.74
2.5	(176.78)	3.0	(125.00)	0.62	97.46
3.0	(125.00)	3.5	(88.39)	1.48	96.84
3.5	(88.39)	4.0	(62.50)	3.12	95.36
4.0	(62.50)	4.5	(44.19)	5.51	92.24
4.5	(44.19)	5.0	(31.25)	8.09	86.73
5.0	(31.25)	5.5	(22.10)	9.89	78.65
5.5	(22.10)	6.0	(15.63)	10.43	68.75
6.0	(15.63)	6.5	(11.05)	9.96	58.32
6.5	(11.05)	7.0	(7.81)	9	48.37
7.0	(7.81)	7.5	(5.52)	7.99	39.36
7.5	(5.52)	8.0	(3.90)	7.08	31.38

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.27	24.3
8.5	(2.76)	9.0	(1.95)	5.45	18.03
9.0	(1.95)	9.5	(1.38)	4.56	12.58
9.5	(1.38)	10.0	(0.98)	3.54	8.02
10.0	(0.98)	10.5	(0.69)	2.45	4.48
10.5	(0.69)	11.0	(0.49)	1.41	2.03
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:41:39 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.83

D[4,3] = 39.84um = 4.65phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.46um = 8.67phi

D[v,0.5] = 12.06um = 6.37phi
D[v,0.84] = 40.94um = 4.61phi
D[v,0.95] = 94.95um = 3.4phi

Kurtosis = 68.49
Skewness = 7.76
Standard Deviation = 137.67 um = 2.86phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .96 phi (Mesokurtic)

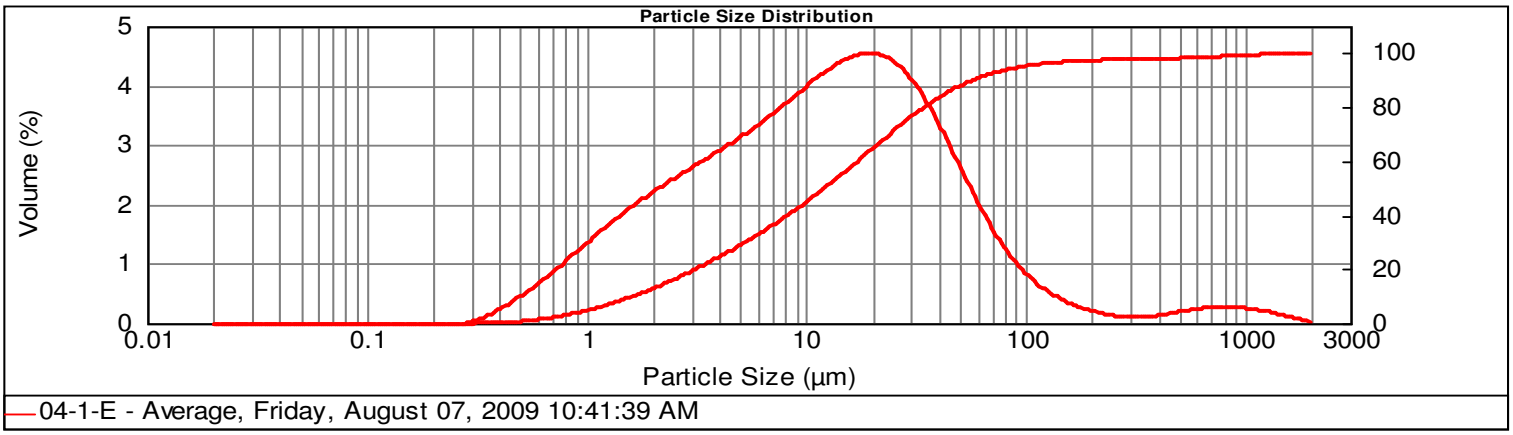
Inclusive Skewness = -0.11 (Coarse Skewed)
Inclusive Mean = 6.55 phi (Silt)

USGS
% Clay (0-2 um) = 12.87
% Fine Silt (2-3.9 um) = 11.13

d (0.1) : 1.622 **um**
d (0.5) : 12.063 **d (0.9) : 57.080**

Wentworth
% Clay (0-3.9 um) = 24
% Silt (3.91-31 um) = 53.26
% Coarse Silt (31 - 62.5 um) = 13.96
% Very Fine sand (62.5 - 125 um) = 5.06

% Fine sand (125-250 um) = 1.31
% Medium sand (250-500 um) = .57
% Coarse sand (500-1000 um) = 1.16
% Very Coarse sand (1000 - 2000 um) = .68



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.2	100
-0.5	(1414.21)	0.0	(1000.00)	0.47	99.8
0.0	(1000.00)	0.5	(707.10)	0.62	99.32
0.5	(707.10)	1.0	(500.00)	0.54	98.7
1.0	(500.00)	1.5	(353.55)	0.33	98.16
1.5	(353.55)	2.0	(250.00)	0.24	97.84
2.0	(250.00)	2.5	(176.78)	0.43	97.6
2.5	(176.78)	3.0	(125.00)	0.88	97.17
3.0	(125.00)	3.5	(88.39)	1.75	96.29
3.5	(88.39)	4.0	(62.50)	3.31	94.54
4.0	(62.50)	4.5	(44.19)	5.63	91.23
4.5	(44.19)	5.0	(31.25)	8.12	85.59
5.0	(31.25)	5.5	(22.10)	9.81	77.47
5.5	(22.10)	6.0	(15.63)	10.28	67.66
6.0	(15.63)	6.5	(11.05)	9.78	57.38
6.5	(11.05)	7.0	(7.81)	8.83	47.6
7.0	(7.81)	7.5	(5.52)	7.82	38.77
7.5	(5.52)	8.0	(3.90)	6.93	30.96
8.0	(3.90)	8.5	(2.76)	6.14	24.03
8.5	(2.76)	9.0	(1.95)	5.36	17.89
9.0	(1.95)	9.5	(1.38)	4.5	12.53
9.5	(1.38)	10.0	(0.98)	3.52	8.02
10.0	(0.98)	10.5	(0.69)	2.45	4.51
10.5	(0.69)	11.0	(0.49)	1.42	2.06
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:47:47 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 10.87

D[4,3] = 43.37um = 4.53phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 12.02um = 6.38phi
D[v,0.84] = 39.33um = 4.67phi
D[v,0.95] = 90.13um = 3.47phi

Kurtosis = 54.63
Skewness = 7.03
Standard Deviation = 155.23 um = 2.69phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .96 phi (Mesokurtic)

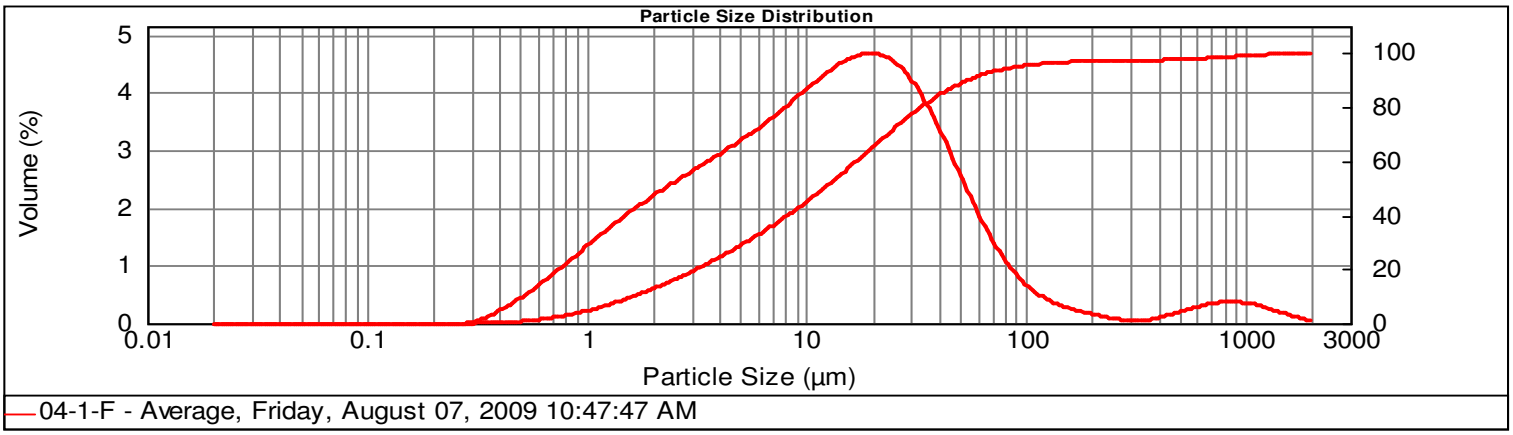
Inclusive Skewness = -0.12 (Coarse Skewed)
Inclusive Mean = 6.57 phi (Silt)

USGS
% Clay (0-2 um) = 12.66
% Fine Silt (2-3.9 um) = 11.15

d (0.1) : 1.647 **um**
d (0.5) : 12.016 **d (0.9) : 54.055**

Wentworth
% Clay (0-3.9 um) = 23.81
% Silt (3.91-31 um) = 54.24
% Coarse Silt (31 - 62.5 um) = 13.9
% Very Fine sand (62.5 - 125 um) = 4.34

% Fine sand (125-250 um) = .98
% Medium sand (250-500 um) = .38
% Coarse sand (500-1000 um) = 1.45
% Very Coarse sand (1000 - 2000 um) = .91



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.27	100
-0.5	(1414.21)	0.0	(1000.00)	0.64	99.73
0.0	(1000.00)	0.5	(707.10)	0.82	99.09
0.5	(707.10)	1.0	(500.00)	0.63	98.27
1.0	(500.00)	1.5	(353.55)	0.27	97.64
1.5	(353.55)	2.0	(250.00)	0.11	97.38
2.0	(250.00)	2.5	(176.78)	0.32	97.26
2.5	(176.78)	3.0	(125.00)	0.67	96.94
3.0	(125.00)	3.5	(88.39)	1.39	96.28
3.5	(88.39)	4.0	(62.50)	2.95	94.89
4.0	(62.50)	4.5	(44.19)	5.46	91.94
4.5	(44.19)	5.0	(31.25)	8.22	86.48
5.0	(31.25)	5.5	(22.10)	10.08	78.26
5.5	(22.10)	6.0	(15.63)	10.55	68.19
6.0	(15.63)	6.5	(11.05)	9.97	57.64
6.5	(11.05)	7.0	(7.81)	8.95	47.67
7.0	(7.81)	7.5	(5.52)	7.9	38.72
7.5	(5.52)	8.0	(3.90)	6.98	30.82

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.17	23.84
8.5	(2.76)	9.0	(1.95)	5.36	17.67
9.0	(1.95)	9.5	(1.38)	4.47	12.32
9.5	(1.38)	10.0	(0.98)	3.47	7.84
10.0	(0.98)	10.5	(0.69)	2.4	4.37
10.5	(0.69)	11.0	(0.49)	1.38	1.97
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:52:10 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.27

D[4,3] = 35.51um = 4.82phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.47um = 8.66phi

D[v,0.5] = 12.05um = 6.37phi
D[v,0.84] = 38.79um = 4.69phi
D[v,0.95] = 80.19um = 3.64phi

Kurtosis = 86.75
Skewness = 8.69
Standard Deviation = 124.37 um = 3.01phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

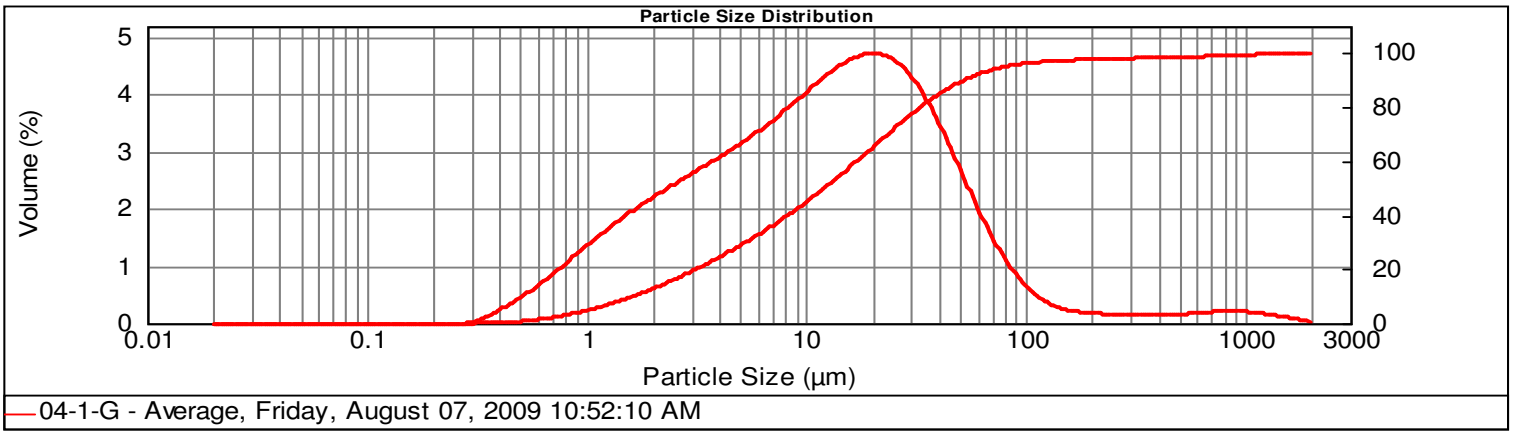
Inclusive Skewness = -0.14 (Coarse Skewed)
Inclusive Mean = 6.57 phi (Silt)

USGS
% Clay (0-2 um) = 12.82
% Fine Silt (2-3.9 um) = 11.08

d (0.1) : 1.627 **um**
d (0.5) : 12.053 **d (0.9) : 52.222**

Wentworth
% Clay (0-3.9 um) = 23.9
% Silt (3.91-31 um) = 54.31
% Coarse Silt (31 - 62.5 um) = 14.38
% Very Fine sand (62.5 - 125 um) = 4.38

% Fine sand (125-250 um) = .97
% Medium sand (250-500 um) = .64
% Coarse sand (500-1000 um) = .86
% Very Coarse sand (1000 - 2000 um) = .56



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.38	99.83
0.0	(1000.00)	0.5	(707.10)	0.46	99.44
0.5	(707.10)	1.0	(500.00)	0.4	98.98
1.0	(500.00)	1.5	(353.55)	0.32	98.58
1.5	(353.55)	2.0	(250.00)	0.32	98.27
2.0	(250.00)	2.5	(176.78)	0.39	97.94
2.5	(176.78)	3.0	(125.00)	0.58	97.55
3.0	(125.00)	3.5	(88.39)	1.33	96.97
3.5	(88.39)	4.0	(62.50)	3.05	95.64
4.0	(62.50)	4.5	(44.19)	5.69	92.59
4.5	(44.19)	5.0	(31.25)	8.46	86.89
5.0	(31.25)	5.5	(22.10)	10.25	78.43
5.5	(22.10)	6.0	(15.63)	10.62	68.18
6.0	(15.63)	6.5	(11.05)	9.97	57.56
6.5	(11.05)	7.0	(7.81)	8.91	47.59
7.0	(7.81)	7.5	(5.52)	7.84	38.68
7.5	(5.52)	8.0	(3.90)	6.92	30.84
8.0	(3.90)	8.5	(2.76)	6.12	23.93
8.5	(2.76)	9.0	(1.95)	5.33	17.81
9.0	(1.95)	9.5	(1.38)	4.48	12.48
9.5	(1.38)	10.0	(0.98)	3.51	8
10.0	(0.98)	10.5	(0.69)	2.45	4.49
10.5	(0.69)	11.0	(0.49)	1.42	2.04
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:56:51 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.11

D[4,3] = 65.68um = 3.93phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.52um = 8.63phi

D[v,0.5] = 12.34um = 6.34phi
D[v,0.84] = 47.23um = 4.4phi
D[v,0.95] = 361.27um = 1.47phi

Kurtosis = 28.67
Skewness = 5.1
Standard Deviation = 202.64 um = 2.3phi

Inclusive SD (Sorting Coeff.) = 2.33 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.21 phi (Leptokurtic)

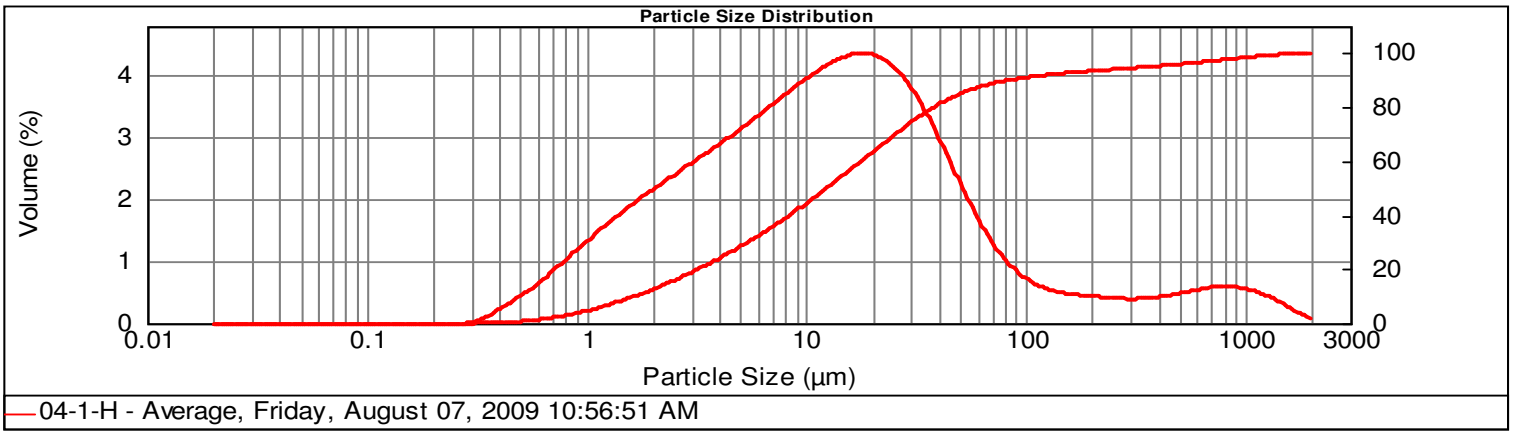
Inclusive Skewness = .04 (Near Symmetrical)
Inclusive Mean = 6.46 phi (Silt)

USGS
% Clay (0-2 um) = 12.55
% Fine Silt (2-3.9 um) = 10.97

d (0.1) : 1.655 **um**
d (0.5) : 12.343 **d (0.9) : 82.647**

Wentworth
% Clay (0-3.9 um) = 23.51
% Silt (3.91-31 um) = 51.87
% Coarse Silt (31 - 62.5 um) = 12.31
% Very Fine sand (62.5 - 125 um) = 4.26

% Fine sand (125-250 um) = 2.09
% Medium sand (250-500 um) = 1.88
% Coarse sand (500-1000 um) = 2.54
% Very Coarse sand (1000 - 2000 um) = 1.53



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.47	100
-0.5	(1414.21)	0.0	(1000.00)	1.06	99.53
0.0	(1000.00)	0.5	(707.10)	1.33	98.47
0.5	(707.10)	1.0	(500.00)	1.21	97.14
1.0	(500.00)	1.5	(353.55)	0.99	95.93
1.5	(353.55)	2.0	(250.00)	0.9	94.94
2.0	(250.00)	2.5	(176.78)	0.97	94.05
2.5	(176.78)	3.0	(125.00)	1.12	93.08
3.0	(125.00)	3.5	(88.39)	1.55	91.96
3.5	(88.39)	4.0	(62.50)	2.71	90.4
4.0	(62.50)	4.5	(44.19)	4.81	87.7
4.5	(44.19)	5.0	(31.25)	7.31	82.88
5.0	(31.25)	5.5	(22.10)	9.16	75.58
5.5	(22.10)	6.0	(15.63)	9.85	66.41
6.0	(15.63)	6.5	(11.05)	9.55	56.57
6.5	(11.05)	7.0	(7.81)	8.75	47.02
7.0	(7.81)	7.5	(5.52)	7.81	38.27
7.5	(5.52)	8.0	(3.90)	6.91	30.45
8.0	(3.90)	8.5	(2.76)	6.07	23.54
8.5	(2.76)	9.0	(1.95)	5.26	17.47
9.0	(1.95)	9.5	(1.38)	4.4	12.22
9.5	(1.38)	10.0	(0.98)	3.43	7.82
10.0	(0.98)	10.5	(0.69)	2.39	4.38
10.5	(0.69)	11.0	(0.49)	1.39	1.99
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 04-1-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:01:19 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.48

D[4,3] = 43um = 4.54phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 12.26um = 6.35phi
D[v,0.84] = 44.12um = 4.5phi
D[v,0.95] = 134.23um = 2.9phi

Kurtosis = 55.46
Skewness = 6.8
Standard Deviation = 131.24 um = 2.93phi

Inclusive SD (Sorting Coeff.) = 2.1 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.01 phi (Mesokurtic)

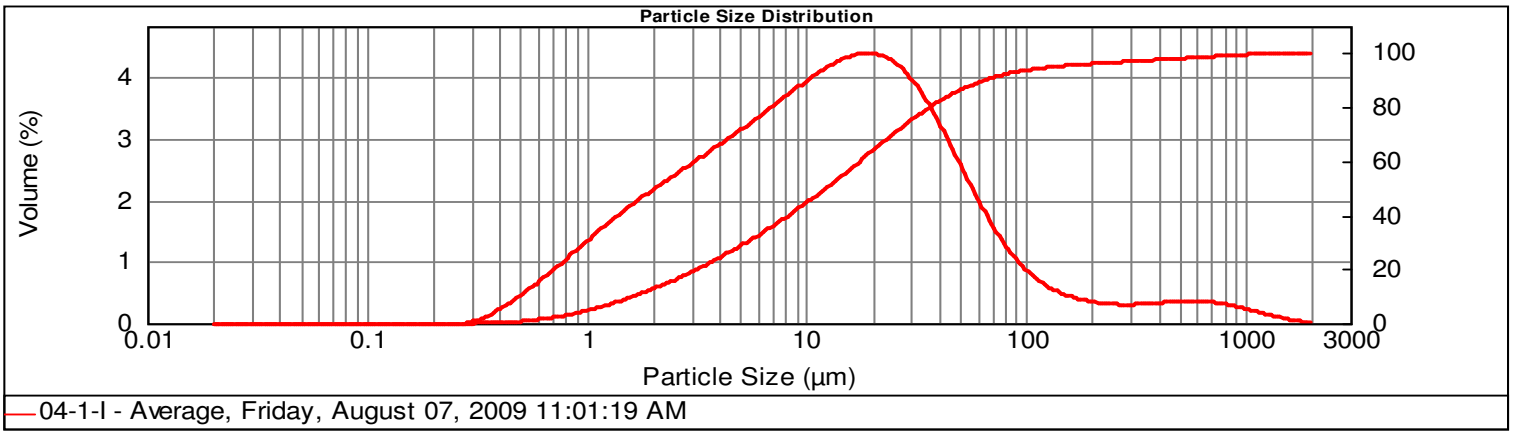
Inclusive Skewness = -0.06 (Near Symmetrical)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 12.66
% Fine Silt (2-3.9 um) = 11.01

d (0.1) : 1.642 **um**
d (0.5) : 12.256 **d (0.9) : 64.764**

Wentworth
% Clay (0-3.9 um) = 23.68
% Silt (3.91-31 um) = 52.28
% Coarse Silt (31 - 62.5 um) = 13.61
% Very Fine sand (62.5 - 125 um) = 5.17

% Fine sand (125-250 um) = 1.85
% Medium sand (250-500 um) = 1.45
% Coarse sand (500-1000 um) = 1.47
% Very Coarse sand (1000 - 2000 um) = .49



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.11	100
-0.5	(1414.21)	0.0	(1000.00)	0.38	99.89
0.0	(1000.00)	0.5	(707.10)	0.67	99.51
0.5	(707.10)	1.0	(500.00)	0.8	98.84
1.0	(500.00)	1.5	(353.55)	0.76	98.04
1.5	(353.55)	2.0	(250.00)	0.69	97.28
2.0	(250.00)	2.5	(176.78)	0.77	96.59
2.5	(176.78)	3.0	(125.00)	1.08	95.82
3.0	(125.00)	3.5	(88.39)	1.84	94.74
3.5	(88.39)	4.0	(62.50)	3.33	92.89
4.0	(62.50)	4.5	(44.19)	5.53	89.57
4.5	(44.19)	5.0	(31.25)	7.87	84.03
5.0	(31.25)	5.5	(22.10)	9.46	76.16
5.5	(22.10)	6.0	(15.63)	9.93	66.7
6.0	(15.63)	6.5	(11.05)	9.55	56.76
6.5	(11.05)	7.0	(7.81)	8.74	47.22
7.0	(7.81)	7.5	(5.52)	7.83	38.47
7.5	(5.52)	8.0	(3.90)	6.94	30.65
8.0	(3.90)	8.5	(2.76)	6.1	23.71
8.5	(2.76)	9.0	(1.95)	5.28	17.61
9.0	(1.95)	9.5	(1.38)	4.42	12.33
9.5	(1.38)	10.0	(0.98)	3.46	7.91
10.0	(0.98)	10.5	(0.69)	2.42	4.44
10.5	(0.69)	11.0	(0.49)	1.41	2.02
11.0	(0.49)	11.5	(0.35)	0.56	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:29:03 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.49

D[4,3] = 53.05um = 4.24phi
D[v,0.05] = .97um = 10.01phi
D[v,0.16] = 2.35um = 8.74phi

D[v,0.5] = 14.03um = 6.16phi
D[v,0.84] = 47.1um = 4.41phi
D[v,0.95] = 93.52um = 3.42phi

Kurtosis = 42.14
Skewness = 6.27
Standard Deviation = 185.58 um = 2.43phi

Inclusive SD (Sorting Coeff.) = 2.08 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

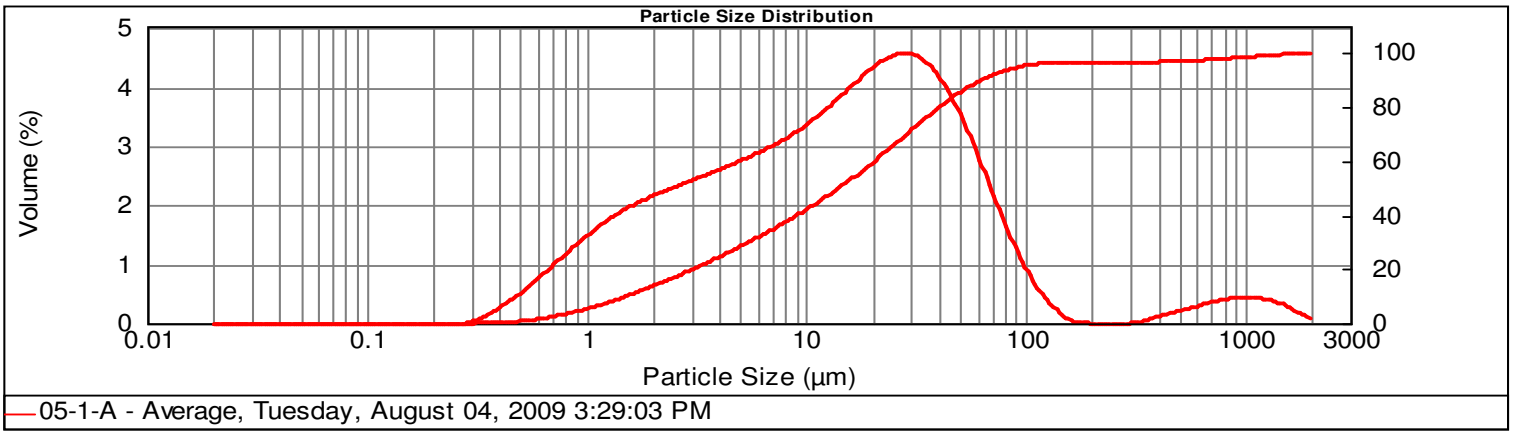
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.43 phi (Silt)

USGS
% Clay (0-2 um) = 13.7
% Fine Silt (2-3.9 um) = 10.34

d (0.1) : 1.519 **um**
d (0.5) : 14.026 **d (0.9) : 62.435**

Wentworth
% Clay (0-3.9 um) = 24.04
% Silt (3.91-31 um) = 48.34
% Coarse Silt (31 - 62.5 um) = 17.64
% Very Fine sand (62.5 - 125 um) = 6.35

% Fine sand (125-250 um) = .32
% Medium sand (250-500 um) = .32
% Coarse sand (500-1000 um) = 1.58
% Very Coarse sand (1000 - 2000 um) = 1.42



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.49	100
-0.5	(1414.21)	0.0	(1000.00)	0.93	99.51
0.0	(1000.00)	0.5	(707.10)	0.94	98.58
0.5	(707.10)	1.0	(500.00)	0.64	97.64
1.0	(500.00)	1.5	(353.55)	0.3	97
1.5	(353.55)	2.0	(250.00)	0.02	96.7
2.0	(250.00)	2.5	(176.78)	0	96.68
2.5	(176.78)	3.0	(125.00)	0.32	96.68
3.0	(125.00)	3.5	(88.39)	1.82	96.36
3.5	(88.39)	4.0	(62.50)	4.53	94.55
4.0	(62.50)	4.5	(44.19)	7.62	90.02
4.5	(44.19)	5.0	(31.25)	9.78	82.4
5.0	(31.25)	5.5	(22.10)	10.3	72.61
5.5	(22.10)	6.0	(15.63)	9.57	62.32
6.0	(15.63)	6.5	(11.05)	8.44	52.75
6.5	(11.05)	7.0	(7.81)	7.44	44.31
7.0	(7.81)	7.5	(5.52)	6.7	36.87
7.5	(5.52)	8.0	(3.90)	6.12	30.18

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.59	24.06
8.5	(2.76)	9.0	(1.95)	5.1	18.47
9.0	(1.95)	9.5	(1.38)	4.55	13.36
9.5	(1.38)	10.0	(0.98)	3.76	8.81
10.0	(0.98)	10.5	(0.69)	2.72	5.05
10.5	(0.69)	11.0	(0.49)	1.61	2.33
11.0	(0.49)	11.5	(0.35)	0.65	0.71
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:33:44 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 27.95

D[4,3] = 57.21um = 4.13phi
D[v,0.05] = .97um = 10.01phi
D[v,0.16] = 2.37um = 8.72phi

D[v,0.5] = 15.25um = 6.03phi
D[v,0.84] = 52.22um = 4.26phi
D[v,0.95] = 103.92um = 3.27phi

Kurtosis = 39.1
Skewness = 6.05
Standard Deviation = 193.08 um = 2.37phi

Inclusive SD (Sorting Coeff.) = 2.14 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

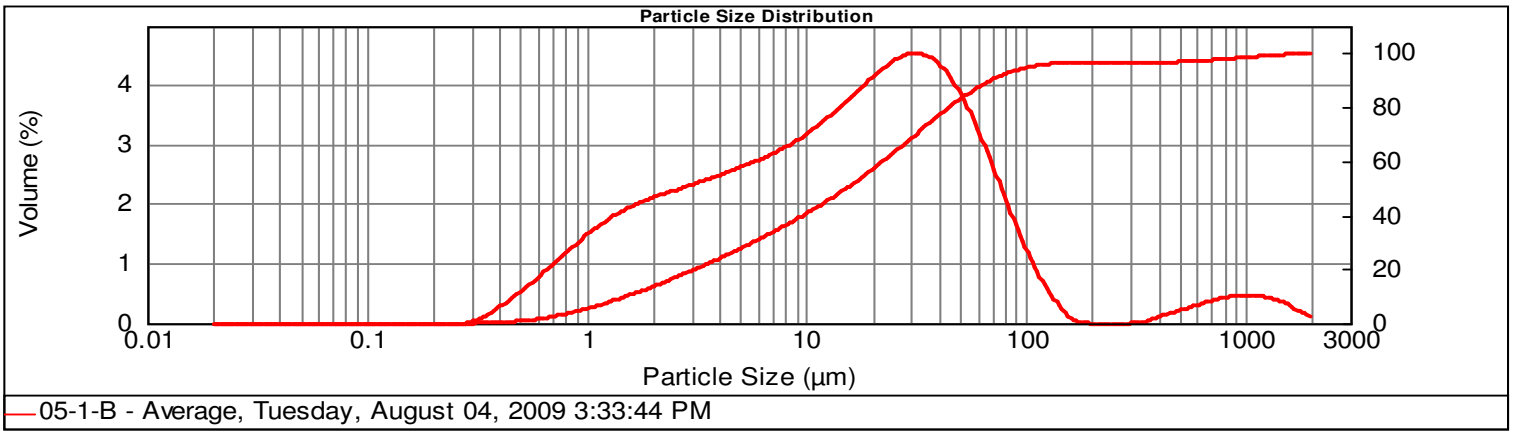
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 13.6
% Fine Silt (2-3.9 um) = 9.94

d (0.1) : 1.521 **um**
d (0.5) : 15.253 **d (0.9) : 69.298**

Wentworth
% Clay (0-3.9 um) = 23.53
% Silt (3.91-31 um) = 45.9
% Coarse Silt (31 - 62.5 um) = 18.6
% Very Fine sand (62.5 - 125 um) = 7.96

% Fine sand (125-250 um) = .51
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = 1.66
% Very Coarse sand (1000 - 2000 um) = 1.55



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.55	100
-0.5	(1414.21)	0.0	(1000.00)	1	99.45
0.0	(1000.00)	0.5	(707.10)	0.98	98.45
0.5	(707.10)	1.0	(500.00)	0.67	97.46
1.0	(500.00)	1.5	(353.55)	0.28	96.79
1.5	(353.55)	2.0	(250.00)	0.01	96.51
2.0	(250.00)	2.5	(176.78)	0	96.5
2.5	(176.78)	3.0	(125.00)	0.51	96.5
3.0	(125.00)	3.5	(88.39)	2.48	95.99
3.5	(88.39)	4.0	(62.50)	5.47	93.51
4.0	(62.50)	4.5	(44.19)	8.37	88.04
4.5	(44.19)	5.0	(31.25)	9.99	79.67
5.0	(31.25)	5.5	(22.10)	10.02	69.68
5.5	(22.10)	6.0	(15.63)	9.07	59.66
6.0	(15.63)	6.5	(11.05)	7.93	50.59
6.5	(11.05)	7.0	(7.81)	6.99	42.66
7.0	(7.81)	7.5	(5.52)	6.31	35.67
7.5	(5.52)	8.0	(3.90)	5.8	29.36
8.0	(3.90)	8.5	(2.76)	5.35	23.56
8.5	(2.76)	9.0	(1.95)	4.94	18.21
9.0	(1.95)	9.5	(1.38)	4.46	13.27
9.5	(1.38)	10.0	(0.98)	3.73	8.81
10.0	(0.98)	10.5	(0.69)	2.73	5.08
10.5	(0.69)	11.0	(0.49)	1.63	2.36
11.0	(0.49)	11.5	(0.35)	0.66	0.73
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:38:36 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 29.85

D[4,3] = 43.13um = 4.54phi
D[v,0.05] = 1.74um = 9.17phi
D[v,0.16] = 4.79um = 7.71phi

D[v,0.5] = 16.76um = 5.9phi
D[v,0.84] = 58.95um = 4.08phi
D[v,0.95] = 122.03um = 3.03phi

Kurtosis = 81.04
Skewness = 8.11
Standard Deviation = 113.09 um = 3.14phi

Inclusive SD (Sorting Coeff.) = 1.83 phi (Poorly Sorted)
Inclusive Kurtosis = 1.01 phi (Mesokurtic)

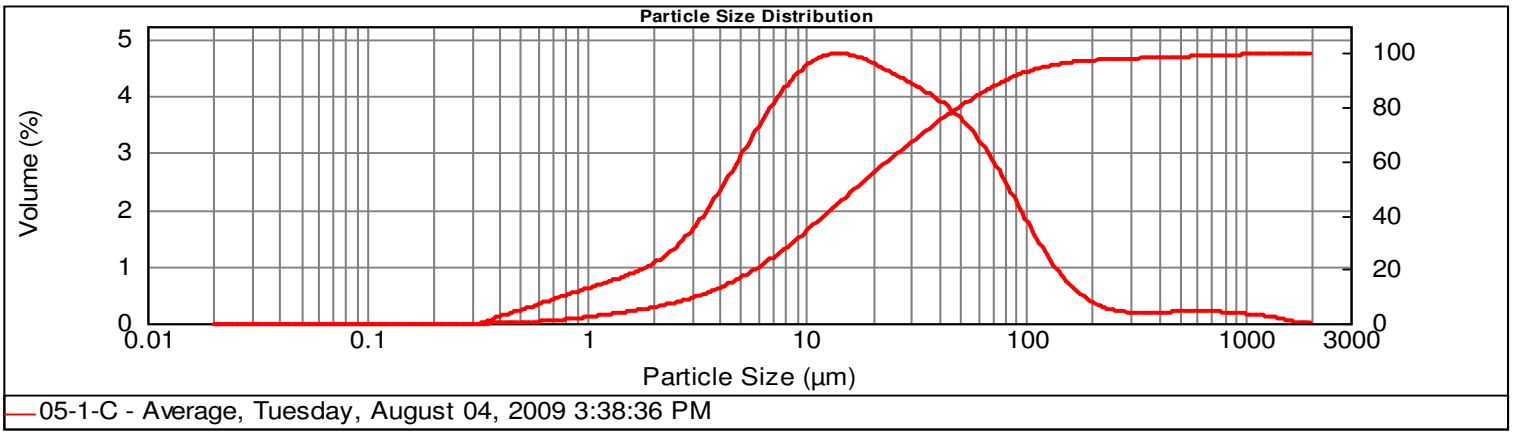
Inclusive Skewness = -0.03 (Near Symmetrical)
Inclusive Mean = 5.9 phi (Silt)

USGS
% Clay (0-2 um) = 5.9
% Fine Silt (2-3.9 um) = 6.74

d (0.1) : 3.179 **um**
d (0.5) : 16.761 **d (0.9) : 80.785**

Wentworth
% Clay (0-3.9 um) = 12.64
% Silt (3.91-31 um) = 55.31
% Coarse Silt (31 - 62.5 um) = 17.29
% Very Fine sand (62.5 - 125 um) = 9.95

% Fine sand (125-250 um) = 2.62
% Medium sand (250-500 um) = .88
% Coarse sand (500-1000 um) = .9
% Very Coarse sand (1000 - 2000 um) = .4



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.09	100
-0.5	(1414.21)	0.0	(1000.00)	0.31	99.91
0.0	(1000.00)	0.5	(707.10)	0.43	99.6
0.5	(707.10)	1.0	(500.00)	0.47	99.17
1.0	(500.00)	1.5	(353.55)	0.44	98.7
1.5	(353.55)	2.0	(250.00)	0.44	98.26
2.0	(250.00)	2.5	(176.78)	0.78	97.82
2.5	(176.78)	3.0	(125.00)	1.84	97.04
3.0	(125.00)	3.5	(88.39)	3.82	95.19
3.5	(88.39)	4.0	(62.50)	6.14	91.38
4.0	(62.50)	4.5	(44.19)	7.98	85.24
4.5	(44.19)	5.0	(31.25)	9.09	77.26
5.0	(31.25)	5.5	(22.10)	9.84	68.17
5.5	(22.10)	6.0	(15.63)	10.5	58.33
6.0	(15.63)	6.5	(11.05)	10.72	47.83
6.5	(11.05)	7.0	(7.81)	10	37.12
7.0	(7.81)	7.5	(5.52)	8.31	27.12
7.5	(5.52)	8.0	(3.90)	6.14	18.8

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.14	12.67
8.5	(2.76)	9.0	(1.95)	2.78	8.52
9.0	(1.95)	9.5	(1.38)	2.03	5.74
9.5	(1.38)	10.0	(0.98)	1.56	3.71
10.0	(0.98)	10.5	(0.69)	1.14	2.15
10.5	(0.69)	11.0	(0.49)	0.71	1
11.0	(0.49)	11.5	(0.35)	0.3	0.3
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Results Report

Sample Name : 05-1-D - Average
Sample bulk lot ref :
Sample source :

Tuesday, August 04, 2009 3:43:40 PM
Operator name : Julie

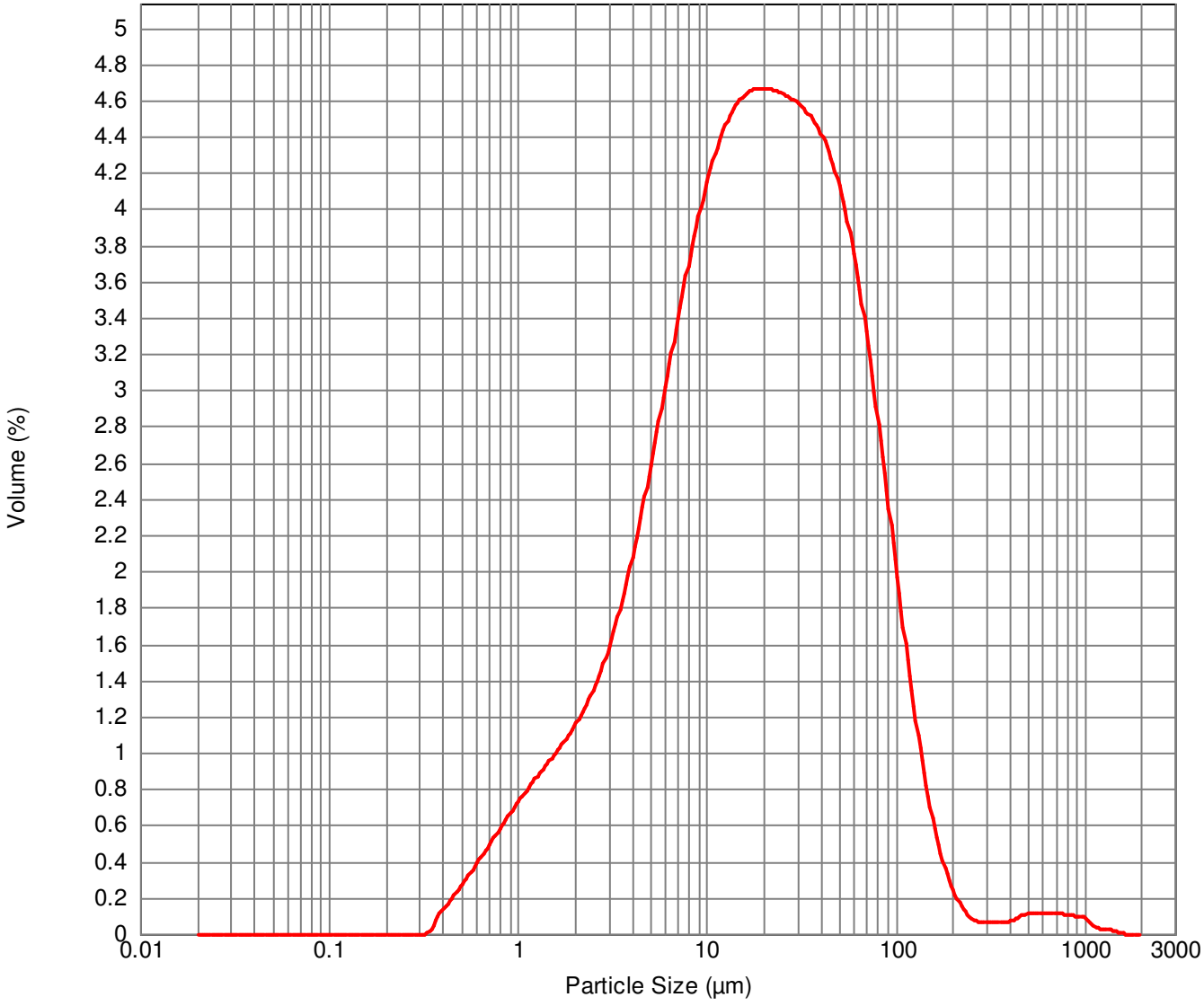
Particle name : Fraunhofer
Particle refractive index : 0.000

Obscuration : 20.76
Stirrer speed : 600
Pump speed : 1500

d (0.1) : 2.898
d (0.2) : 5.882

d (0.5) : 18.210
d (0.8) : 50.203
d (0.9) : 76.432

Particle Size Distribution



—05-1-D - Average, Tuesday, August 04, 2009 3:43:40 PM

Size (µm)	Volume In %
0.010	0.00
0.011	0.00
0.013	0.00
0.015	0.00
0.017	0.00
0.020	0.00
0.023	0.00
0.026	0.00
0.030	0.00
0.035	0.00
0.040	0.00
0.046	0.00
0.052	0.00
0.060	0.00
0.069	0.00
0.079	0.00

Size (µm)	Volume In %
0.079	0.00
0.091	0.00
0.105	0.00
0.120	0.00
0.138	0.00
0.158	0.00
0.182	0.00
0.209	0.00
0.240	0.00
0.275	0.00
0.316	0.01
0.363	0.11
0.417	0.18
0.479	0.25
0.550	0.33
0.631	0.42

Size (µm)	Volume In %
0.631	0.42
0.724	0.50
0.832	0.59
0.955	0.67
1.096	0.74
1.259	0.82
1.445	0.89
1.660	0.96
1.905	1.05
2.188	1.15
2.512	1.29
2.884	1.45
3.311	1.65
3.802	1.89
4.365	2.17
5.012	2.46

Size (µm)	Volume In %
5.012	2.46
5.754	2.77
6.607	3.08
7.586	3.37
8.710	3.62
10.000	3.84
11.482	4.01
13.183	4.12
15.136	4.18
17.378	4.21
19.953	4.21
22.909	4.19
26.303	4.16
30.200	4.11
34.674	4.04
39.811	3.93

Size (µm)	Volume In %
39.811	3.93
45.709	3.76
52.481	3.53
60.256	3.21
69.183	2.82
79.433	2.38
91.201	1.92
104.713	1.46
120.226	1.04
138.038	0.69
158.489	0.43
181.970	0.25
208.930	0.14
239.883	0.07
275.423	0.06
316.228	0.06

Size (µm)	Volume In %
316.228	0.06
363.078	0.06
416.869	0.08
478.630	0.10
549.541	0.11
630.957	0.11
724.436	0.10
831.764	0.09
954.993	0.07
1096.478	0.03
1258.925	0.02
1445.440	0.00
1659.587	0.00
1905.461	0.00
2187.762	0.00
2511.886	0.00

Size (µm)	Volume In %
2511.886	0.00
2884.032	0.00
3311.311	0.00
3801.894	0.00
4365.158	0.00
5011.872	0.00
5754.399	0.00
6606.934	0.00
7585.776	0.00
8709.636	0.00
10000.000	0.00

Grain-Size Analysis Report

Sample: 05-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:48:44 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.67

D[4,3] = 36.9um = 4.76phi
D[v,0.05] = 1.53um = 9.35phi
D[v,0.16] = 4.36um = 7.84phi

D[v,0.5] = 16.27um = 5.94phi
D[v,0.84] = 55.26um = 4.18phi
D[v,0.95] = 104.19um = 3.26phi

Kurtosis = 126.43
Skewness = 10.13
Standard Deviation = 96.84 um = 3.37phi

Inclusive SD (Sorting Coeff.) = 1.84 phi (Poorly Sorted)
Inclusive Kurtosis = .99 phi (Mesokurtic)

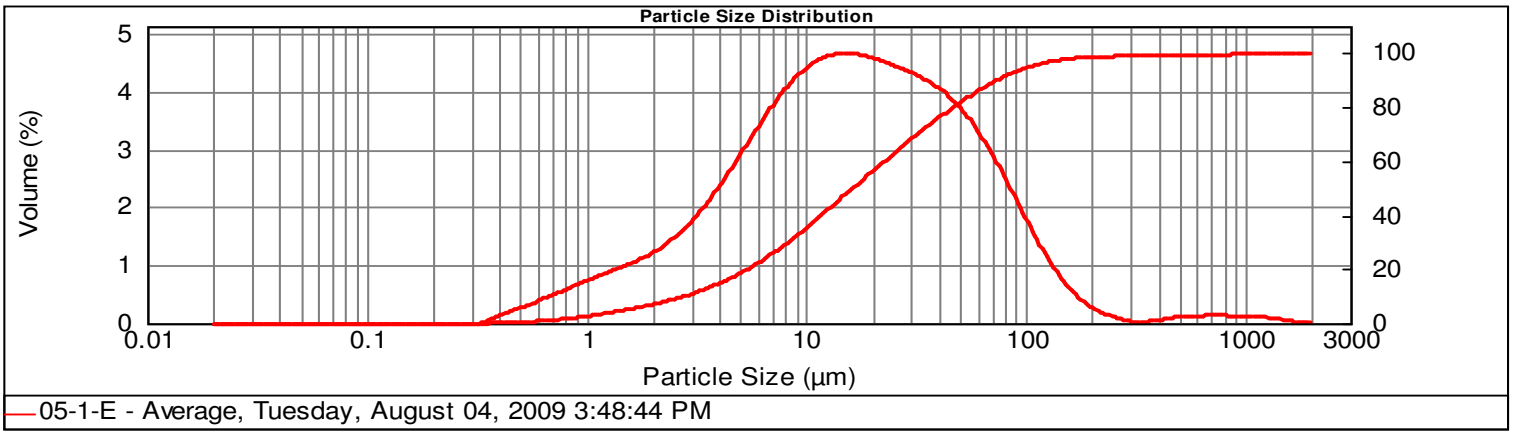
Inclusive Skewness = -0.08 (Near Symmetrical)
Inclusive Mean = 5.99 phi (Silt)

USGS
% Clay (0-2 um) = 6.95
% Fine Silt (2-3.9 um) = 7.29

d (0.1) : 2.791 **um**
d (0.5) : 16.271 **d (0.9) : 73.861**

Wentworth
% Clay (0-3.9 um) = 14.24
% Silt (3.91-31 um) = 54.72
% Coarse Silt (31 - 62.5 um) = 17.76
% Very Fine sand (62.5 - 125 um) = 9.94

% Fine sand (125-250 um) = 2.2
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = .57
% Very Coarse sand (1000 - 2000 um) = .31



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.08	100
-0.5	(1414.21)	0.0	(1000.00)	0.23	99.92
0.0	(1000.00)	0.5	(707.10)	0.29	99.69
0.5	(707.10)	1.0	(500.00)	0.28	99.4
1.0	(500.00)	1.5	(353.55)	0.15	99.12
1.5	(353.55)	2.0	(250.00)	0.11	98.97
2.0	(250.00)	2.5	(176.78)	0.53	98.86
2.5	(176.78)	3.0	(125.00)	1.67	98.34
3.0	(125.00)	3.5	(88.39)	3.75	96.66
3.5	(88.39)	4.0	(62.50)	6.2	92.92
4.0	(62.50)	4.5	(44.19)	8.18	86.72
4.5	(44.19)	5.0	(31.25)	9.35	78.54
5.0	(31.25)	5.5	(22.10)	9.99	69.19
5.5	(22.10)	6.0	(15.63)	10.43	59.19
6.0	(15.63)	6.5	(11.05)	10.47	48.77
6.5	(11.05)	7.0	(7.81)	9.72	38.3
7.0	(7.81)	7.5	(5.52)	8.15	28.58
7.5	(5.52)	8.0	(3.90)	6.17	20.43

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.37	14.26
8.5	(2.76)	9.0	(1.95)	3.13	9.89
9.0	(1.95)	9.5	(1.38)	2.4	6.76
9.5	(1.38)	10.0	(0.98)	1.87	4.36
10.0	(0.98)	10.5	(0.69)	1.35	2.49
10.5	(0.69)	11.0	(0.49)	0.82	1.14
11.0	(0.49)	11.5	(0.35)	0.33	0.33
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:53:30 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.25

D[4,3] = 36.72um = 4.77phi
D[v,0.05] = 1.57um = 9.32phi
D[v,0.16] = 4.36um = 7.84phi

D[v,0.5] = 15.42um = 6.02phi
D[v,0.84] = 52.74um = 4.25phi
D[v,0.95] = 101.09um = 3.31phi

Kurtosis = 127.3
Skewness = 10.32
Standard Deviation = 104.83 um = 3.25phi

Inclusive SD (Sorting Coeff.) = 1.81 phi (Poorly Sorted)
Inclusive Kurtosis = 1 phi (Mesokurtic)

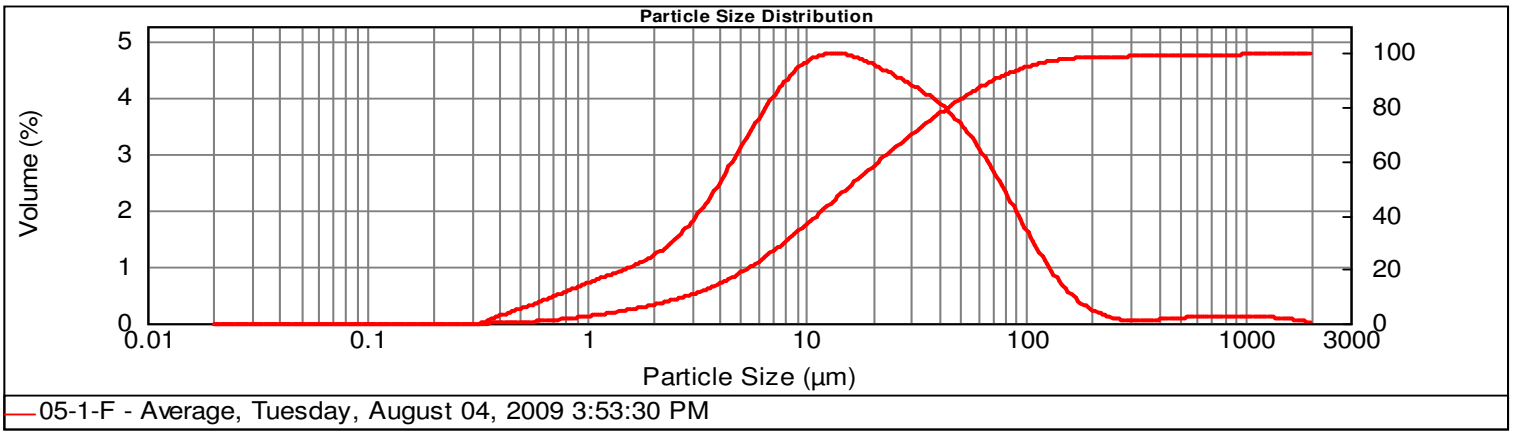
Inclusive Skewness = -0.06 (Near Symmetrical)
Inclusive Mean = 6.04 phi (Silt)

USGS
% Clay (0-2 um) = 6.74
% Fine Silt (2-3.9 um) = 7.42

d (0.1) : 2.848 um
d (0.5) : 15.418
d (0.9) : 71.011

Wentworth
% Clay (0-3.9 um) = 14.15
% Silt (3.91-31 um) = 56.41
% Coarse Silt (31 - 62.5 um) = 17.04
% Very Fine sand (62.5 - 125 um) = 9.23

% Fine sand (125-250 um) = 1.96
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = .53
% Very Coarse sand (1000 - 2000 um) = .39



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.14	100
-0.5	(1414.21)	0.0	(1000.00)	0.26	99.86
0.0	(1000.00)	0.5	(707.10)	0.28	99.61
0.5	(707.10)	1.0	(500.00)	0.25	99.33
1.0	(500.00)	1.5	(353.55)	0.16	99.08
1.5	(353.55)	2.0	(250.00)	0.12	98.92
2.0	(250.00)	2.5	(176.78)	0.46	98.8
2.5	(176.78)	3.0	(125.00)	1.5	98.34
3.0	(125.00)	3.5	(88.39)	3.44	96.84
3.5	(88.39)	4.0	(62.50)	5.79	93.39
4.0	(62.50)	4.5	(44.19)	7.77	87.6
4.5	(44.19)	5.0	(31.25)	9.05	79.83
5.0	(31.25)	5.5	(22.10)	9.86	70.78
5.5	(22.10)	6.0	(15.63)	10.51	60.93
6.0	(15.63)	6.5	(11.05)	10.8	50.41
6.5	(11.05)	7.0	(7.81)	10.24	39.61
7.0	(7.81)	7.5	(5.52)	8.67	29.38
7.5	(5.52)	8.0	(3.90)	6.53	20.7

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.51	14.18
8.5	(2.76)	9.0	(1.95)	3.12	9.67
9.0	(1.95)	9.5	(1.38)	2.33	6.55
9.5	(1.38)	10.0	(0.98)	1.81	4.23
10.0	(0.98)	10.5	(0.69)	1.31	2.42
10.5	(0.69)	11.0	(0.49)	0.8	1.11
11.0	(0.49)	11.5	(0.35)	0.32	0.32
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-1-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:58:12 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.54

D[4,3] = 49.53um = 4.34phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.43um = 8.69phi

D[v,0.5] = 13.84um = 6.17phi
D[v,0.84] = 42.52um = 4.56phi
D[v,0.95] = 78.74um = 3.67phi

Kurtosis = 45.48
Skewness = 6.53
Standard Deviation = 180.68 um = 2.47phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

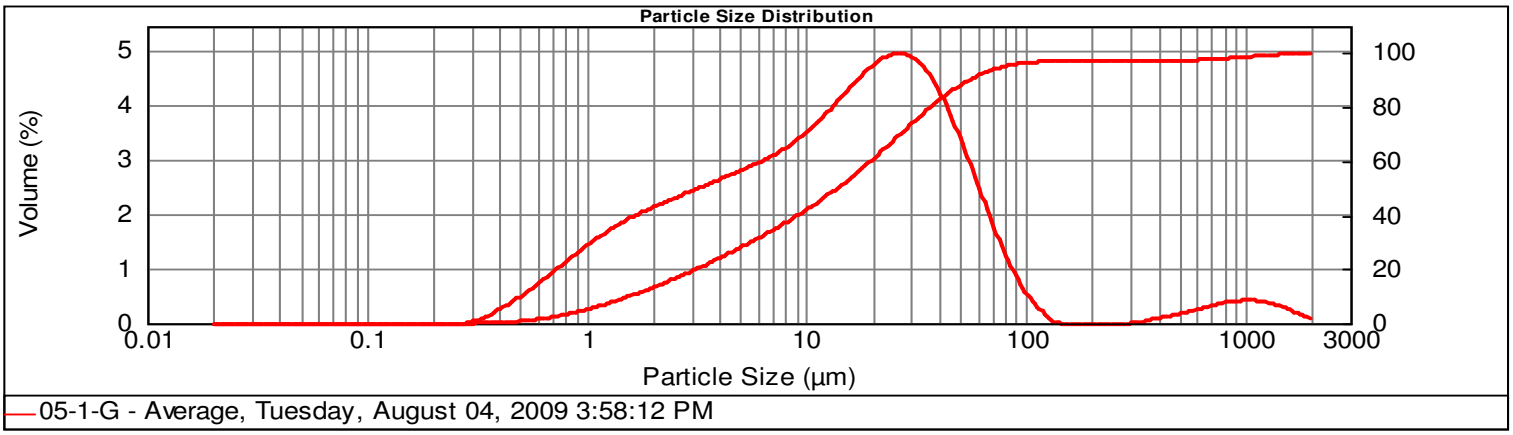
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 13.21
% Fine Silt (2-3.9 um) = 10.34

d (0.1) : 1.569 **um**
d (0.5) : 13.841 **d (0.9) : 55.056**

Wentworth
% Clay (0-3.9 um) = 23.55
% Silt (3.91-31 um) = 51.07
% Coarse Silt (31 - 62.5 um) = 17.59
% Very Fine sand (62.5 - 125 um) = 4.69

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .27
% Coarse sand (500-1000 um) = 1.44
% Very Coarse sand (1000 - 2000 um) = 1.36



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.47	100
-0.5	(1414.21)	0.0	(1000.00)	0.88	99.53
0.0	(1000.00)	0.5	(707.10)	0.88	98.64
0.5	(707.10)	1.0	(500.00)	0.57	97.77
1.0	(500.00)	1.5	(353.55)	0.25	97.2
1.5	(353.55)	2.0	(250.00)	0.02	96.95
2.0	(250.00)	2.5	(176.78)	0	96.93
2.5	(176.78)	3.0	(125.00)	0.03	96.93
3.0	(125.00)	3.5	(88.39)	1.05	96.91
3.5	(88.39)	4.0	(62.50)	3.64	95.85
4.0	(62.50)	4.5	(44.19)	7.2	92.22
4.5	(44.19)	5.0	(31.25)	10.14	85.01
5.0	(31.25)	5.5	(22.10)	11.15	74.88
5.5	(22.10)	6.0	(15.63)	10.42	63.73
6.0	(15.63)	6.5	(11.05)	8.99	53.31
6.5	(11.05)	7.0	(7.81)	7.7	44.32
7.0	(7.81)	7.5	(5.52)	6.83	36.62
7.5	(5.52)	8.0	(3.90)	6.21	29.78
8.0	(3.90)	8.5	(2.76)	5.63	23.58
8.5	(2.76)	9.0	(1.95)	5.06	17.95
9.0	(1.95)	9.5	(1.38)	4.44	12.89
9.5	(1.38)	10.0	(0.98)	3.62	8.45
10.0	(0.98)	10.5	(0.69)	2.6	4.83
10.5	(0.69)	11.0	(0.49)	1.54	2.22
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-1-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 4:05:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 26.49

D[4,3] = 54.5um = 4.2phi
D[v,0.05] = .98um = 10phi
D[v,0.16] = 2.35um = 8.73phi

D[v,0.5] = 13.68um = 6.19phi
D[v,0.84] = 46.52um = 4.43phi
D[v,0.95] = 94.15um = 3.41phi

Kurtosis = 39.25
Skewness = 6.07
Standard Deviation = 190.81 um = 2.39phi

Inclusive SD (Sorting Coeff.) = 2.08 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

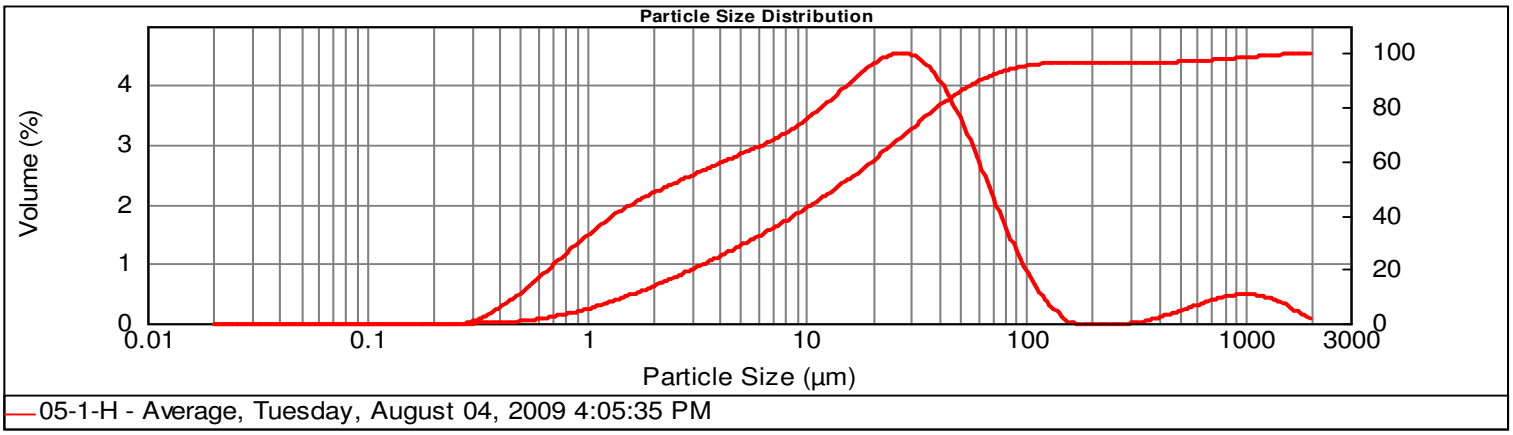
Inclusive Skewness = -0.17 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 13.63
% Fine Silt (2-3.9 um) = 10.56

d (0.1) : 1.529 **um**
d (0.5) : 13.685 **d (0.9) : 62.046**

Wentworth
% Clay (0-3.9 um) = 24.18
% Silt (3.91-31 um) = 48.76
% Coarse Silt (31 - 62.5 um) = 17.18
% Very Fine sand (62.5 - 125 um) = 6.13

% Fine sand (125-250 um) = .25
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = 1.69
% Very Coarse sand (1000 - 2000 um) = 1.51



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.51	100
-0.5	(1414.21)	0.0	(1000.00)	1	99.49
0.0	(1000.00)	0.5	(707.10)	1.02	98.49
0.5	(707.10)	1.0	(500.00)	0.67	97.47
1.0	(500.00)	1.5	(353.55)	0.27	96.8
1.5	(353.55)	2.0	(250.00)	0.01	96.53
2.0	(250.00)	2.5	(176.78)	0	96.51
2.5	(176.78)	3.0	(125.00)	0.25	96.51
3.0	(125.00)	3.5	(88.39)	1.75	96.26
3.5	(88.39)	4.0	(62.50)	4.39	94.51
4.0	(62.50)	4.5	(44.19)	7.39	90.13
4.5	(44.19)	5.0	(31.25)	9.56	82.74
5.0	(31.25)	5.5	(22.10)	10.19	73.18
5.5	(22.10)	6.0	(15.63)	9.6	62.99
6.0	(15.63)	6.5	(11.05)	8.52	53.39
6.5	(11.05)	7.0	(7.81)	7.54	44.87
7.0	(7.81)	7.5	(5.52)	6.83	37.33
7.5	(5.52)	8.0	(3.90)	6.29	30.49

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.74	24.21
8.5	(2.76)	9.0	(1.95)	5.18	18.47
9.0	(1.95)	9.5	(1.38)	4.56	13.29
9.5	(1.38)	10.0	(0.98)	3.73	8.73
10.0	(0.98)	10.5	(0.69)	2.69	5
10.5	(0.69)	11.0	(0.49)	1.6	2.31
11.0	(0.49)	11.5	(0.35)	0.65	0.71
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:38:41 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.26

D[4,3] = 63.34um = 3.98phi
D[v,0.05] = 1.06um = 9.89phi
D[v,0.16] = 2.57um = 8.61phi

D[v,0.5] = 13.72um = 6.19phi
D[v,0.84] = 46.34um = 4.43phi
D[v,0.95] = 152.34um = 2.71phi

Kurtosis = 29.53
Skewness = 5.4
Standard Deviation = 218.67 um = 2.19phi

Inclusive SD (Sorting Coeff.) = 2.13 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.03 phi (Mesokurtic)

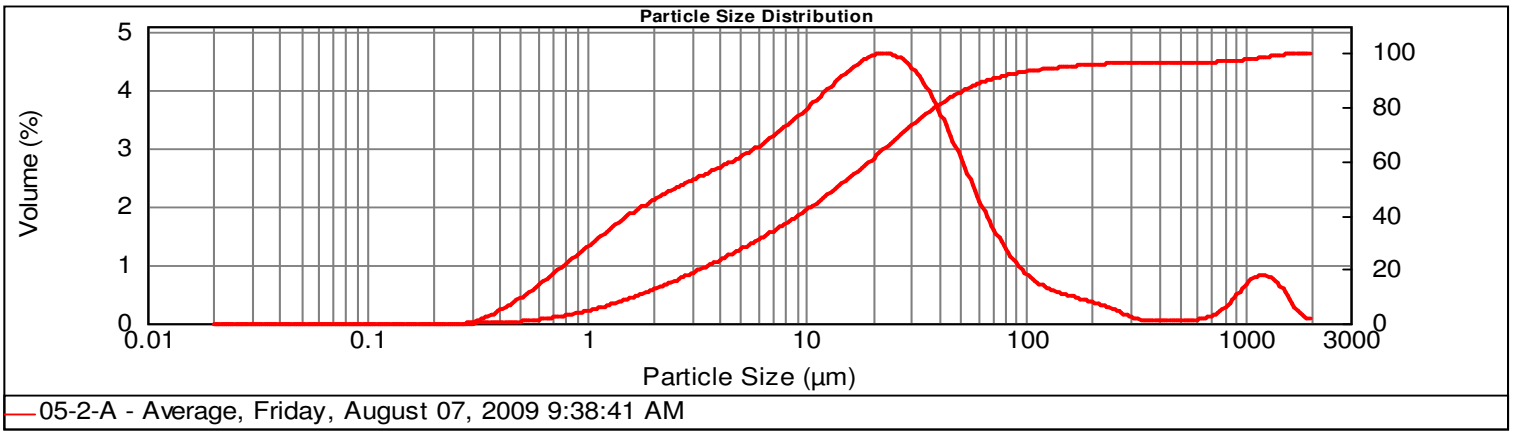
Inclusive Skewness = -0.1 (Near Symmetrical)
Inclusive Mean = 6.41 phi (Silt)

USGS
% Clay (0-2 um) = 12.38
% Fine Silt (2-3.9 um) = 10.44

d (0.1) : 1.671 **um**
d (0.5) : 13.719 **d (0.9) : 67.382**

Wentworth
% Clay (0-3.9 um) = 22.82
% Silt (3.91-31 um) = 51.15
% Coarse Silt (31 - 62.5 um) = 15.09
% Very Fine sand (62.5 - 125 um) = 5.24

% Fine sand (125-250 um) = 1.9
% Medium sand (250-500 um) = .37
% Coarse sand (500-1000 um) = .96
% Very Coarse sand (1000 - 2000 um) = 2.46



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.69	100
-0.5	(1414.21)	0.0	(1000.00)	1.77	99.31
0.0	(1000.00)	0.5	(707.10)	0.81	97.54
0.5	(707.10)	1.0	(500.00)	0.15	96.73
1.0	(500.00)	1.5	(353.55)	0.09	96.58
1.5	(353.55)	2.0	(250.00)	0.29	96.49
2.0	(250.00)	2.5	(176.78)	0.76	96.21
2.5	(176.78)	3.0	(125.00)	1.14	95.44
3.0	(125.00)	3.5	(88.39)	1.82	94.3
3.5	(88.39)	4.0	(62.50)	3.42	92.48
4.0	(62.50)	4.5	(44.19)	6.06	89.06
4.5	(44.19)	5.0	(31.25)	8.8	83
5.0	(31.25)	5.5	(22.10)	10.32	74.2
5.5	(22.10)	6.0	(15.63)	10.26	63.88
6.0	(15.63)	6.5	(11.05)	9.27	53.62
6.5	(11.05)	7.0	(7.81)	8.09	44.35
7.0	(7.81)	7.5	(5.52)	7.09	36.26
7.5	(5.52)	8.0	(3.90)	6.32	29.17

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.71	22.84
8.5	(2.76)	9.0	(1.95)	5.08	17.13
9.0	(1.95)	9.5	(1.38)	4.33	12.05
9.5	(1.38)	10.0	(0.98)	3.4	7.73
10.0	(0.98)	10.5	(0.69)	2.36	4.33
10.5	(0.69)	11.0	(0.49)	1.37	1.97
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:43:03 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.69

D[4,3] = 58.44um = 4.1phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.6um = 8.59phi

D[v,0.5] = 14.19um = 6.14phi
D[v,0.84] = 49.03um = 4.35phi
D[v,0.95] = 154.45um = 2.69phi

Kurtosis = 37.17
Skewness = 5.88
Standard Deviation = 193.46 um = 2.37phi

Inclusive SD (Sorting Coeff.) = 2.15 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.02 phi (Mesokurtic)

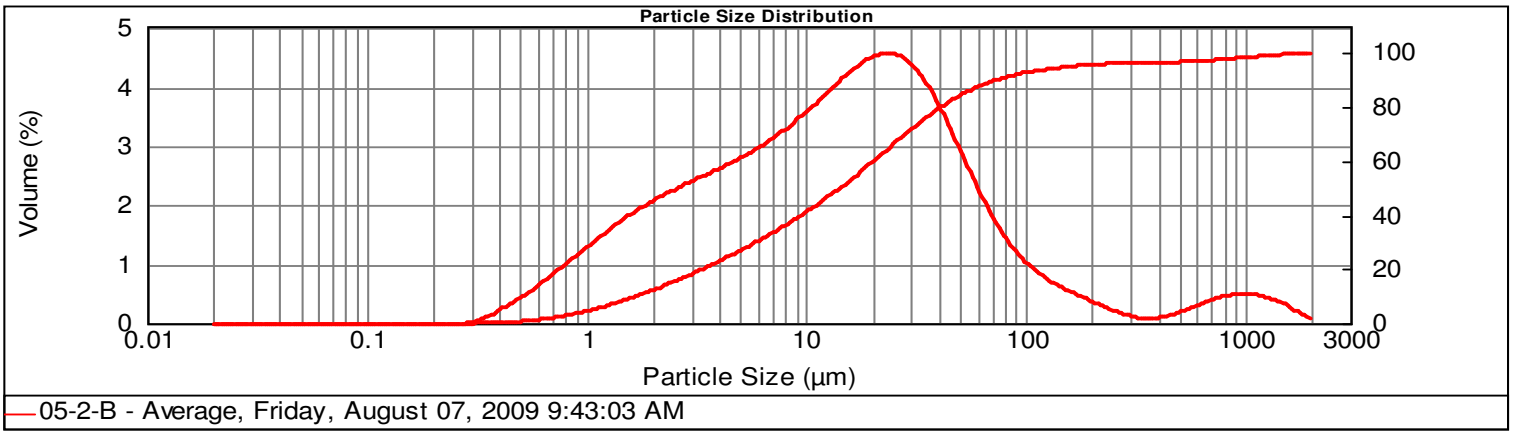
Inclusive Skewness = -0.1 (Near Symmetrical)
Inclusive Mean = 6.36 phi (Silt)

USGS
% Clay (0-2 um) = 12.25
% Fine Silt (2-3.9 um) = 10.25

d (0.1) : 1.683 **um**
d (0.5) : 14.187 **d (0.9) : 72.530**

Wentworth
% Clay (0-3.9 um) = 22.5
% Silt (3.91-31 um) = 50.22
% Coarse Silt (31 - 62.5 um) = 15.39
% Very Fine sand (62.5 - 125 um) = 5.99

% Fine sand (125-250 um) = 2.1
% Medium sand (250-500 um) = .54
% Coarse sand (500-1000 um) = 1.71
% Very Coarse sand (1000 - 2000 um) = 1.54



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.52	100
-0.5	(1414.21)	0.0	(1000.00)	1.02	99.48
0.0	(1000.00)	0.5	(707.10)	1.06	98.46
0.5	(707.10)	1.0	(500.00)	0.65	97.4
1.0	(500.00)	1.5	(353.55)	0.25	96.74
1.5	(353.55)	2.0	(250.00)	0.29	96.49
2.0	(250.00)	2.5	(176.78)	0.75	96.2
2.5	(176.78)	3.0	(125.00)	1.35	95.45
3.0	(125.00)	3.5	(88.39)	2.2	94.1
3.5	(88.39)	4.0	(62.50)	3.79	91.9
4.0	(62.50)	4.5	(44.19)	6.29	88.11
4.5	(44.19)	5.0	(31.25)	8.87	81.82
5.0	(31.25)	5.5	(22.10)	10.24	72.95
5.5	(22.10)	6.0	(15.63)	10.07	62.71
6.0	(15.63)	6.5	(11.05)	9.04	52.64
6.5	(11.05)	7.0	(7.81)	7.9	43.59
7.0	(7.81)	7.5	(5.52)	6.95	35.69
7.5	(5.52)	8.0	(3.90)	6.21	28.74
8.0	(3.90)	8.5	(2.76)	5.61	22.53
8.5	(2.76)	9.0	(1.95)	4.99	16.92
9.0	(1.95)	9.5	(1.38)	4.26	11.93
9.5	(1.38)	10.0	(0.98)	3.36	7.67
10.0	(0.98)	10.5	(0.69)	2.35	4.3
10.5	(0.69)	11.0	(0.49)	1.36	1.96
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:47:36 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.69

D[4,3] = 41.18um = 4.6phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 14.33um = 6.12phi
D[v,0.84] = 45.79um = 4.45phi
D[v,0.95] = 97.47um = 3.36phi

Kurtosis = 72.21
Skewness = 7.99
Standard Deviation = 136.66 um = 2.87phi

Inclusive SD (Sorting Coeff.) = 2.02 phi (Very Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

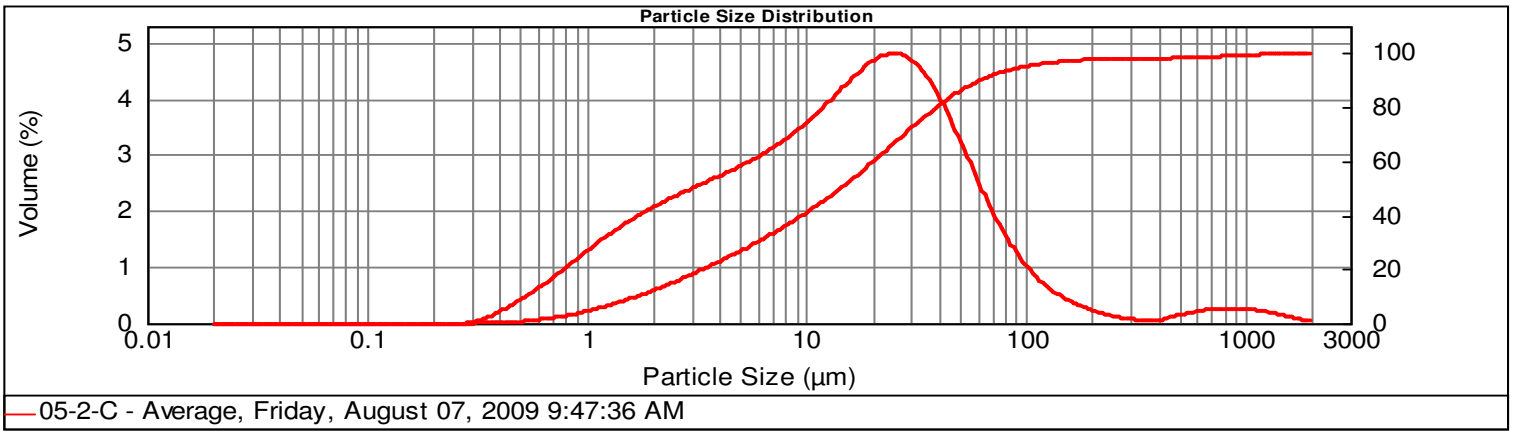
Inclusive Skewness = -0.17 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 12.09
% Fine Silt (2-3.9 um) = 10.21

d (0.1) : 1.703 **um**
d (0.5) : 14.334 **d (0.9) : 62.081**

Wentworth
% Clay (0-3.9 um) = 22.3
% Silt (3.91-31 um) = 50.98
% Coarse Silt (31 - 62.5 um) = 16.82
% Very Fine sand (62.5 - 125 um) = 6.28

% Fine sand (125-250 um) = 1.51
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = 1.06
% Very Coarse sand (1000 - 2000 um) = .7



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.48	99.79
0.0	(1000.00)	0.5	(707.10)	0.6	99.3
0.5	(707.10)	1.0	(500.00)	0.46	98.71
1.0	(500.00)	1.5	(353.55)	0.17	98.25
1.5	(353.55)	2.0	(250.00)	0.17	98.07
2.0	(250.00)	2.5	(176.78)	0.47	97.9
2.5	(176.78)	3.0	(125.00)	1.05	97.43
3.0	(125.00)	3.5	(88.39)	2.15	96.38
3.5	(88.39)	4.0	(62.50)	4.13	94.24
4.0	(62.50)	4.5	(44.19)	6.95	90.11
4.5	(44.19)	5.0	(31.25)	9.62	83.15
5.0	(31.25)	5.5	(22.10)	10.81	73.53
5.5	(22.10)	6.0	(15.63)	10.33	62.72
6.0	(15.63)	6.5	(11.05)	9.07	52.38
6.5	(11.05)	7.0	(7.81)	7.86	43.31
7.0	(7.81)	7.5	(5.52)	6.92	35.45
7.5	(5.52)	8.0	(3.90)	6.2	28.53

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.59	22.33
8.5	(2.76)	9.0	(1.95)	4.97	16.74
9.0	(1.95)	9.5	(1.38)	4.23	11.77
9.5	(1.38)	10.0	(0.98)	3.33	7.54
10.0	(0.98)	10.5	(0.69)	2.31	4.21
10.5	(0.69)	11.0	(0.49)	1.33	1.89
11.0	(0.49)	11.5	(0.35)	0.52	0.56
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:52:50 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.06

D[4,3] = 38.8um = 4.69phi
D[v,0.05] = 1.06um = 9.89phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 13.64um = 6.2phi
D[v,0.84] = 40.83um = 4.61phi
D[v,0.95] = 78.53um = 3.67phi

Kurtosis = 75.24
Skewness = 8.22
Standard Deviation = 138.37 um = 2.85phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

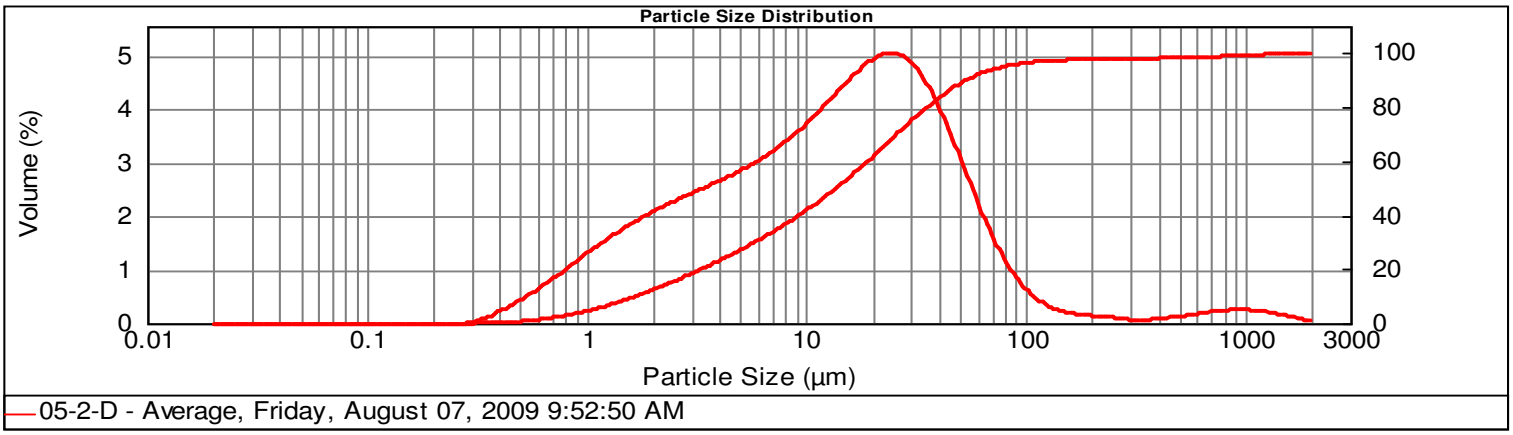
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 12.31
% Fine Silt (2-3.9 um) = 10.35

d (0.1) : 1.676 **um**
d (0.5) : 13.640 **d (0.9) : 53.388**

Wentworth
% Clay (0-3.9 um) = 22.67
% Silt (3.91-31 um) = 53.3
% Coarse Silt (31 - 62.5 um) = 16.57
% Very Fine sand (62.5 - 125 um) = 4.59

% Fine sand (125-250 um) = .81
% Medium sand (250-500 um) = .38
% Coarse sand (500-1000 um) = .95
% Very Coarse sand (1000 - 2000 um) = .74



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.24	100
-0.5	(1414.21)	0.0	(1000.00)	0.5	99.76
0.0	(1000.00)	0.5	(707.10)	0.55	99.26
0.5	(707.10)	1.0	(500.00)	0.39	98.7
1.0	(500.00)	1.5	(353.55)	0.21	98.31
1.5	(353.55)	2.0	(250.00)	0.16	98.1
2.0	(250.00)	2.5	(176.78)	0.3	97.93
2.5	(176.78)	3.0	(125.00)	0.52	97.64
3.0	(125.00)	3.5	(88.39)	1.3	97.12
3.5	(88.39)	4.0	(62.50)	3.29	95.83
4.0	(62.50)	4.5	(44.19)	6.55	92.53
4.5	(44.19)	5.0	(31.25)	9.77	85.99
5.0	(31.25)	5.5	(22.10)	11.33	76.22
5.5	(22.10)	6.0	(15.63)	10.95	64.89
6.0	(15.63)	6.5	(11.05)	9.59	53.94
6.5	(11.05)	7.0	(7.81)	8.21	44.35
7.0	(7.81)	7.5	(5.52)	7.13	36.14
7.5	(5.52)	8.0	(3.90)	6.32	29.01
8.0	(3.90)	8.5	(2.76)	5.67	22.69
8.5	(2.76)	9.0	(1.95)	5.03	17.02
9.0	(1.95)	9.5	(1.38)	4.29	11.99
9.5	(1.38)	10.0	(0.98)	3.38	7.71
10.0	(0.98)	10.5	(0.69)	2.36	4.33
10.5	(0.69)	11.0	(0.49)	1.37	1.97
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 9:57:20 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.64

D[4,3] = 39.83um = 4.65phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.53um = 8.63phi

D[v,0.5] = 13.18um = 6.25phi
D[v,0.84] = 41.1um = 4.6phi
D[v,0.95] = 82.24um = 3.6phi

Kurtosis = 71.11
Skewness = 8.05
Standard Deviation = 145.57 um = 2.78phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .93 phi (Mesokurtic)

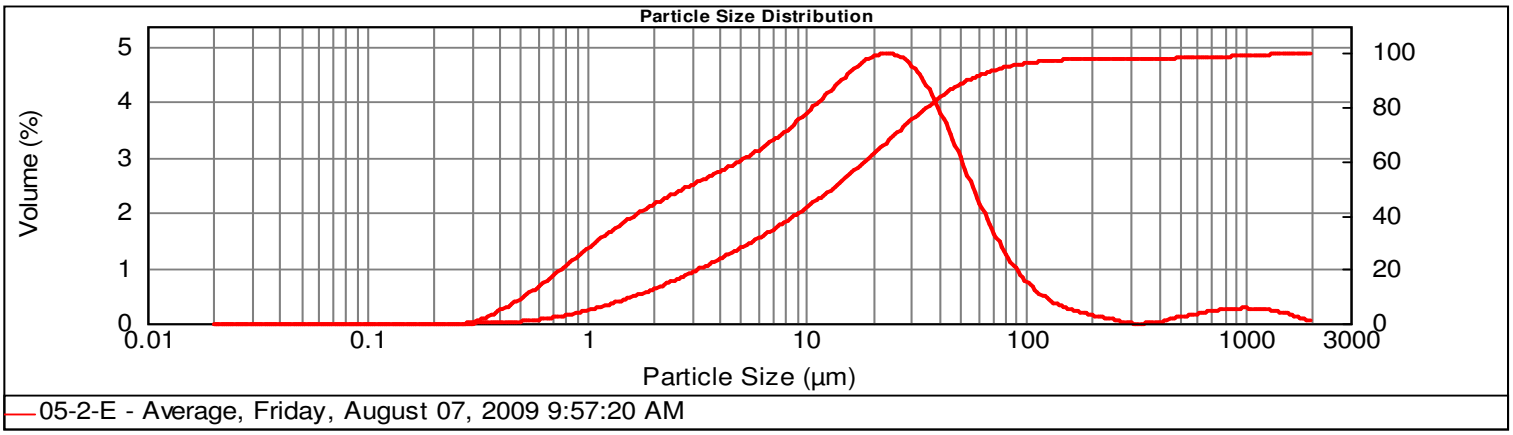
Inclusive Skewness = -0.17 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 12.56
% Fine Silt (2-3.9 um) = 10.6

d (0.1) : 1.651 **um**
d (0.5) : 13.182 **d (0.9) : 54.627**

Wentworth
% Clay (0-3.9 um) = 23.15
% Silt (3.91-31 um) = 53.04
% Coarse Silt (31 - 62.5 um) = 15.89
% Very Fine sand (62.5 - 125 um) = 5.01

% Fine sand (125-250 um) = .97
% Medium sand (250-500 um) = .13
% Coarse sand (500-1000 um) = .95
% Very Coarse sand (1000 - 2000 um) = .86



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.29	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.71
0.0	(1000.00)	0.5	(707.10)	0.58	99.14
0.5	(707.10)	1.0	(500.00)	0.37	98.56
1.0	(500.00)	1.5	(353.55)	0.09	98.19
1.5	(353.55)	2.0	(250.00)	0.03	98.1
2.0	(250.00)	2.5	(176.78)	0.29	98.07
2.5	(176.78)	3.0	(125.00)	0.68	97.77
3.0	(125.00)	3.5	(88.39)	1.57	97.09
3.5	(88.39)	4.0	(62.50)	3.44	95.52
4.0	(62.50)	4.5	(44.19)	6.35	92.08
4.5	(44.19)	5.0	(31.25)	9.3	85.73
5.0	(31.25)	5.5	(22.10)	10.87	76.43
5.5	(22.10)	6.0	(15.63)	10.7	65.56
6.0	(15.63)	6.5	(11.05)	9.58	54.86
6.5	(11.05)	7.0	(7.81)	8.32	45.28
7.0	(7.81)	7.5	(5.52)	7.29	36.96
7.5	(5.52)	8.0	(3.90)	6.49	29.67
8.0	(3.90)	8.5	(2.76)	5.81	23.18
8.5	(2.76)	9.0	(1.95)	5.14	17.37
9.0	(1.95)	9.5	(1.38)	4.37	12.23
9.5	(1.38)	10.0	(0.98)	3.45	7.85
10.0	(0.98)	10.5	(0.69)	2.41	4.4
10.5	(0.69)	11.0	(0.49)	1.39	2
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:01:58 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.39

D[4,3] = 41.36um = 4.6phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.64um = 8.56phi

D[v,0.5] = 14.58um = 6.1phi
D[v,0.84] = 49.93um = 4.32phi
D[v,0.95] = 108.6um = 3.2phi

Kurtosis = 78.46
Skewness = 8.25
Standard Deviation = 130.84 um = 2.93phi

Inclusive SD (Sorting Coeff.) = 2.07 phi (Very Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

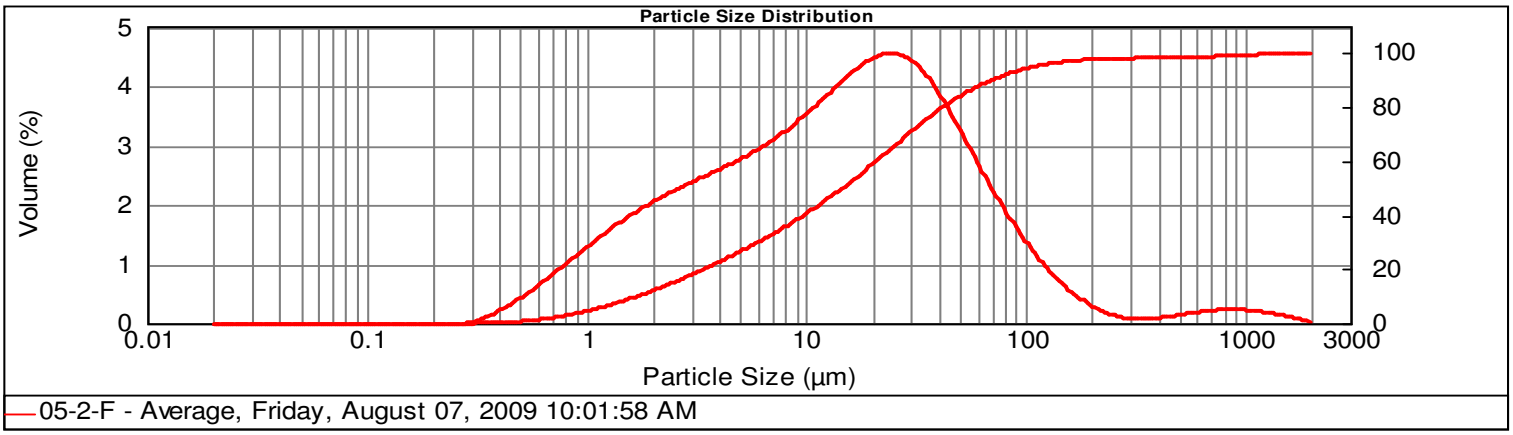
Inclusive Skewness = -0.15 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.05
% Fine Silt (2-3.9 um) = 10.12

d (0.1) : 1.705 **um**
d (0.5) : 14.581 **d (0.9) : 69.512**

Wentworth
% Clay (0-3.9 um) = 22.17
% Silt (3.91-31 um) = 49.66
% Coarse Silt (31 - 62.5 um) = 16.47
% Very Fine sand (62.5 - 125 um) = 7.67

% Fine sand (125-250 um) = 2.05
% Medium sand (250-500 um) = .42
% Coarse sand (500-1000 um) = .93
% Very Coarse sand (1000 - 2000 um) = .63



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.2	100
-0.5	(1414.21)	0.0	(1000.00)	0.43	99.8
0.0	(1000.00)	0.5	(707.10)	0.52	99.37
0.5	(707.10)	1.0	(500.00)	0.41	98.85
1.0	(500.00)	1.5	(353.55)	0.22	98.44
1.5	(353.55)	2.0	(250.00)	0.19	98.22
2.0	(250.00)	2.5	(176.78)	0.57	98.02
2.5	(176.78)	3.0	(125.00)	1.47	97.45
3.0	(125.00)	3.5	(88.39)	2.89	95.98
3.5	(88.39)	4.0	(62.50)	4.78	93.08
4.0	(62.50)	4.5	(44.19)	7.06	88.31
4.5	(44.19)	5.0	(31.25)	9.19	81.25
5.0	(31.25)	5.5	(22.10)	10.24	72.06
5.5	(22.10)	6.0	(15.63)	9.95	61.82
6.0	(15.63)	6.5	(11.05)	8.91	51.87
6.5	(11.05)	7.0	(7.81)	7.78	42.96
7.0	(7.81)	7.5	(5.52)	6.85	35.18
7.5	(5.52)	8.0	(3.90)	6.13	28.34

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.54	22.2
8.5	(2.76)	9.0	(1.95)	4.92	16.66
9.0	(1.95)	9.5	(1.38)	4.2	11.74
9.5	(1.38)	10.0	(0.98)	3.31	7.54
10.0	(0.98)	10.5	(0.69)	2.31	4.23
10.5	(0.69)	11.0	(0.49)	1.34	1.92
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:06:32 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.17

D[4,3] = 49.7um = 4.33phi
D[v,0.05] = 1.11um = 9.82phi
D[v,0.16] = 2.86um = 8.45phi

D[v,0.5] = 16.97um = 5.88phi
D[v,0.84] = 64.92um = 3.95phi
D[v,0.95] = 158.82um = 2.65phi

Kurtosis = 67.25
Skewness = 7.49
Standard Deviation = 137.41 um = 2.86phi

Inclusive SD (Sorting Coeff.) = 2.21 phi (Very Poorly Sorted)
Inclusive Kurtosis = .96 phi (Mesokurtic)

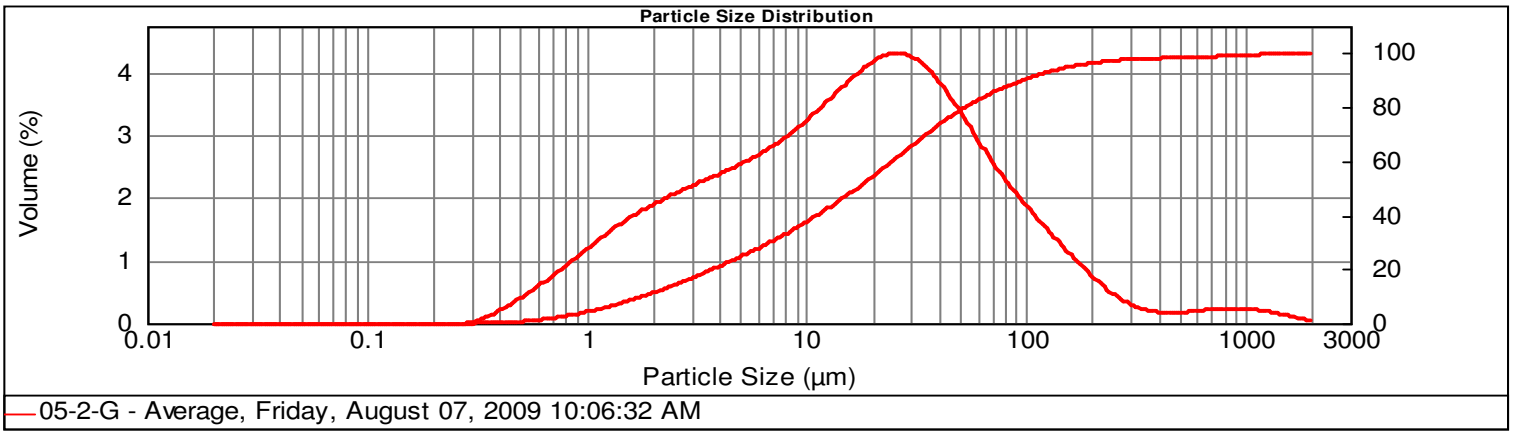
Inclusive Skewness = -0.12 (Coarse Skewed)
Inclusive Mean = 6.09 phi (Silt)

USGS
% Clay (0-2 um) = 11.26
% Fine Silt (2-3.9 um) = 9.34

d (0.1) : 1.803 **um**
d (0.5) : 16.970 **d (0.9) : 96.105**

Wentworth
% Clay (0-3.9 um) = 20.6
% Silt (3.91-31 um) = 46.06
% Coarse Silt (31 - 62.5 um) = 16.65
% Very Fine sand (62.5 - 125 um) = 9.66

% Fine sand (125-250 um) = 4.31
% Medium sand (250-500 um) = 1.1
% Coarse sand (500-1000 um) = .96
% Very Coarse sand (1000 - 2000 um) = .66



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.22	100
-0.5	(1414.21)	0.0	(1000.00)	0.45	99.78
0.0	(1000.00)	0.5	(707.10)	0.52	99.34
0.5	(707.10)	1.0	(500.00)	0.44	98.82
1.0	(500.00)	1.5	(353.55)	0.4	98.37
1.5	(353.55)	2.0	(250.00)	0.71	97.98
2.0	(250.00)	2.5	(176.78)	1.56	97.27
2.5	(176.78)	3.0	(125.00)	2.75	95.71
3.0	(125.00)	3.5	(88.39)	4.08	92.96
3.5	(88.39)	4.0	(62.50)	5.58	88.89
4.0	(62.50)	4.5	(44.19)	7.38	83.3
4.5	(44.19)	5.0	(31.25)	9.04	75.92
5.0	(31.25)	5.5	(22.10)	9.73	66.88
5.5	(22.10)	6.0	(15.63)	9.27	57.15
6.0	(15.63)	6.5	(11.05)	8.21	47.88
6.5	(11.05)	7.0	(7.81)	7.13	39.67
7.0	(7.81)	7.5	(5.52)	6.28	32.54
7.5	(5.52)	8.0	(3.90)	5.64	26.26

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.1	20.62
8.5	(2.76)	9.0	(1.95)	4.55	15.52
9.0	(1.95)	9.5	(1.38)	3.9	10.97
9.5	(1.38)	10.0	(0.98)	3.09	7.07
10.0	(0.98)	10.5	(0.69)	2.16	3.98
10.5	(0.69)	11.0	(0.49)	1.26	1.81
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:10:52 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 9.79

D[4,3] = 45.94um = 4.44phi
D[v,0.05] = 1.15um = 9.76phi
D[v,0.16] = 2.97um = 8.4phi

D[v,0.5] = 16.63um = 5.91phi
D[v,0.84] = 65.43um = 3.93phi
D[v,0.95] = 170.21um = 2.55phi

Kurtosis = 68.43
Skewness = 7.14
Standard Deviation = 109.14 um = 3.2phi

Inclusive SD (Sorting Coeff.) = 2.21 phi (Very Poorly Sorted)
Inclusive Kurtosis = .99 phi (Mesokurtic)

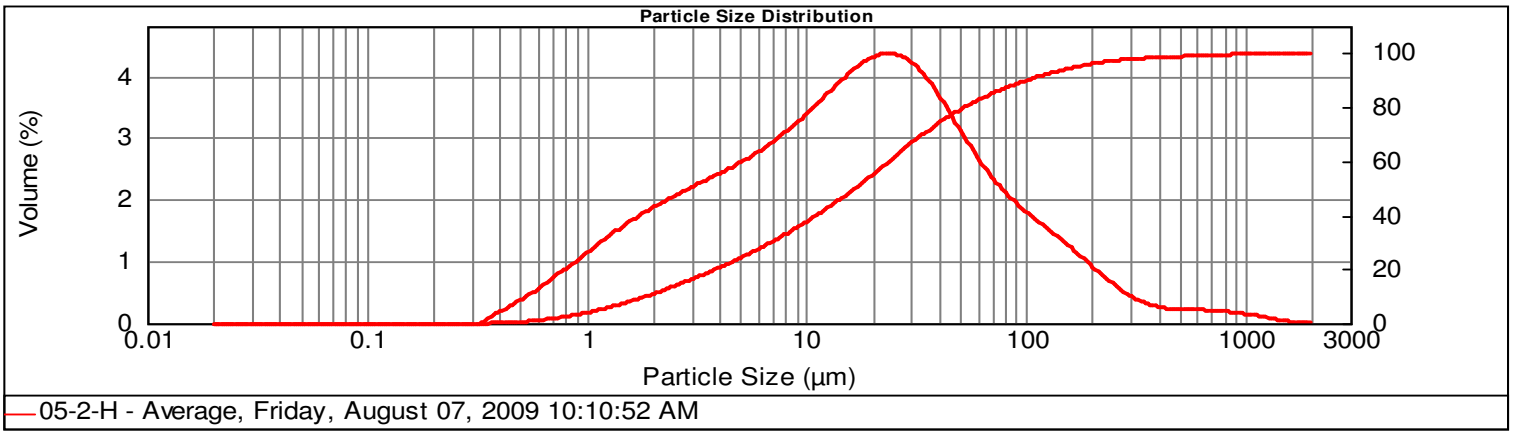
Inclusive Skewness = -0.09 (Near Symmetrical)
Inclusive Mean = 6.08 phi (Silt)

USGS
% Clay (0-2 um) = 10.76
% Fine Silt (2-3.9 um) = 9.34

d (0.1) : 1.877 **um**
d (0.5) : 16.625 **d (0.9) : 101.136**

Wentworth
% Clay (0-3.9 um) = 20.1
% Silt (3.91-31 um) = 47.38
% Coarse Silt (31 - 62.5 um) = 15.75
% Very Fine sand (62.5 - 125 um) = 9.06

% Fine sand (125-250 um) = 4.91
% Medium sand (250-500 um) = 1.6
% Coarse sand (500-1000 um) = .9
% Very Coarse sand (1000 - 2000 um) = .29



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.23	99.94
0.0	(1000.00)	0.5	(707.10)	0.41	99.71
0.5	(707.10)	1.0	(500.00)	0.49	99.3
1.0	(500.00)	1.5	(353.55)	0.58	98.81
1.5	(353.55)	2.0	(250.00)	1.02	98.22
2.0	(250.00)	2.5	(176.78)	1.93	97.21
2.5	(176.78)	3.0	(125.00)	2.98	95.28
3.0	(125.00)	3.5	(88.39)	3.95	92.3
3.5	(88.39)	4.0	(62.50)	5.11	88.35
4.0	(62.50)	4.5	(44.19)	6.82	83.24
4.5	(44.19)	5.0	(31.25)	8.72	76.42
5.0	(31.25)	5.5	(22.10)	9.78	67.71
5.5	(22.10)	6.0	(15.63)	9.58	57.92
6.0	(15.63)	6.5	(11.05)	8.57	48.35
6.5	(11.05)	7.0	(7.81)	7.43	39.77
7.0	(7.81)	7.5	(5.52)	6.47	32.34
7.5	(5.52)	8.0	(3.90)	5.74	25.87
8.0	(3.90)	8.5	(2.76)	5.13	20.13
8.5	(2.76)	9.0	(1.95)	4.52	14.99
9.0	(1.95)	9.5	(1.38)	3.81	10.48
9.5	(1.38)	10.0	(0.98)	2.97	6.67
10.0	(0.98)	10.5	(0.69)	2.06	3.69
10.5	(0.69)	11.0	(0.49)	1.19	1.63
11.0	(0.49)	11.5	(0.35)	0.45	0.45
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:15:21 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.41

D[4,3] = 56.91um = 4.14phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.69um = 8.54phi

D[v,0.5] = 15.02um = 6.06phi
D[v,0.84] = 59.99um = 4.06phi
D[v,0.95] = 234.18um = 2.09phi

Kurtosis = 41.75
Skewness = 5.9
Standard Deviation = 158.29 um = 2.66phi

Inclusive SD (Sorting Coeff.) = 2.3 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.05 phi (Mesokurtic)

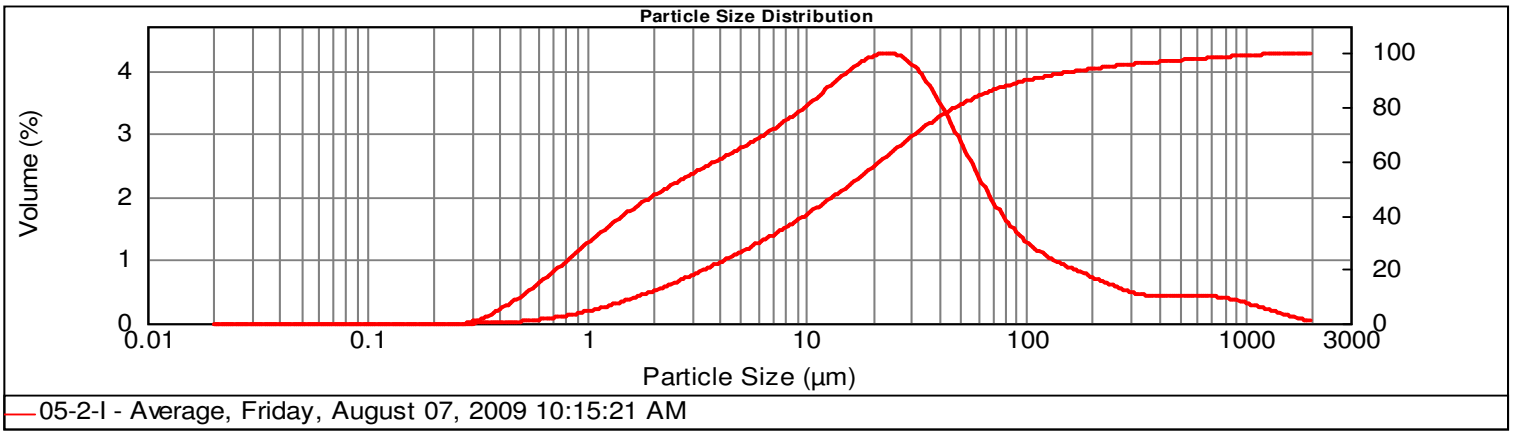
Inclusive Skewness = -0.04 (Near Symmetrical)
Inclusive Mean = 6.22 phi (Silt)

USGS
% Clay (0-2 um) = 11.87
% Fine Silt (2-3.9 um) = 10.02

d (0.1) : 1.727 **um**
d (0.5) : 15.016 **d (0.9) : 101.559**

Wentworth
% Clay (0-3.9 um) = 21.89
% Silt (3.91-31 um) = 47.91
% Coarse Silt (31 - 62.5 um) = 14.81
% Very Fine sand (62.5 - 125 um) = 6.96

% Fine sand (125-250 um) = 3.69
% Medium sand (250-500 um) = 2.11
% Coarse sand (500-1000 um) = 1.85
% Very Coarse sand (1000 - 2000 um) = .78



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.22	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.78
0.0	(1000.00)	0.5	(707.10)	0.87	99.22
0.5	(707.10)	1.0	(500.00)	0.98	98.35
1.0	(500.00)	1.5	(353.55)	0.97	97.37
1.5	(353.55)	2.0	(250.00)	1.14	96.4
2.0	(250.00)	2.5	(176.78)	1.58	95.26
2.5	(176.78)	3.0	(125.00)	2.1	93.68
3.0	(125.00)	3.5	(88.39)	2.82	91.57
3.5	(88.39)	4.0	(62.50)	4.14	88.75
4.0	(62.50)	4.5	(44.19)	6.22	84.61
4.5	(44.19)	5.0	(31.25)	8.38	78.4
5.0	(31.25)	5.5	(22.10)	9.56	70.02
5.5	(22.10)	6.0	(15.63)	9.43	60.46
6.0	(15.63)	6.5	(11.05)	8.57	51.03
6.5	(11.05)	7.0	(7.81)	7.61	42.47
7.0	(7.81)	7.5	(5.52)	6.81	34.85
7.5	(5.52)	8.0	(3.90)	6.13	28.05

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.51	21.92
8.5	(2.76)	9.0	(1.95)	4.86	16.41
9.0	(1.95)	9.5	(1.38)	4.12	11.56
9.5	(1.38)	10.0	(0.98)	3.25	7.44
10.0	(0.98)	10.5	(0.69)	2.27	4.19
10.5	(0.69)	11.0	(0.49)	1.32	1.91
11.0	(0.49)	11.5	(0.35)	0.53	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 05-2-J - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 10:19:45 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.91

D[4,3] = 45.94um = 4.44phi
D[v,0.05] = 1.02um = 9.94phi
D[v,0.16] = 2.38um = 8.72phi

D[v,0.5] = 11.85um = 6.4phi
D[v,0.84] = 43.65um = 4.52phi
D[v,0.95] = 183.97um = 2.44phi

Kurtosis = 40.66
Skewness = 5.85
Standard Deviation = 134.95 um = 2.89phi

Inclusive SD (Sorting Coeff.) = 2.19 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.06 phi (Mesokurtic)

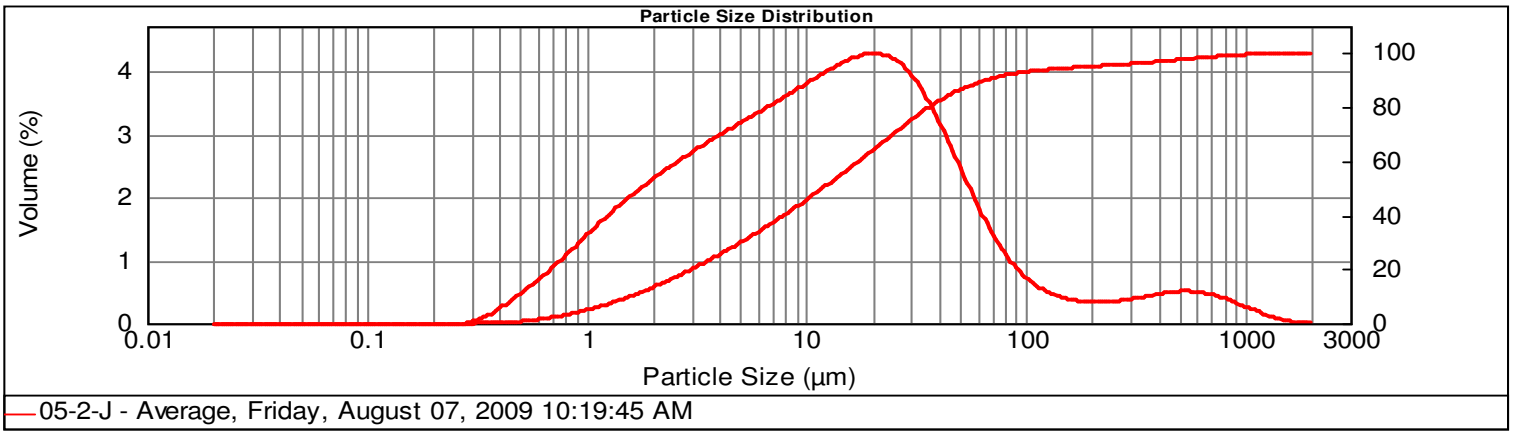
Inclusive Skewness = -0.02 (Near Symmetrical)
Inclusive Mean = 6.54 phi (Silt)

USGS
% Clay (0-2 um) = 13.3
% Fine Silt (2-3.9 um) = 11.54

d (0.1) : 1.583 **um**
d (0.5) : 11.846 **d (0.9) : 65.349**

Wentworth
% Clay (0-3.9 um) = 24.84
% Silt (3.91-31 um) = 51.41
% Coarse Silt (31 - 62.5 um) = 13.26
% Very Fine sand (62.5 - 125 um) = 4.48

% Fine sand (125-250 um) = 1.7
% Medium sand (250-500 um) = 1.94
% Coarse sand (500-1000 um) = 1.95
% Very Coarse sand (1000 - 2000 um) = .43



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.36	99.94
0.0	(1000.00)	0.5	(707.10)	0.82	99.57
0.5	(707.10)	1.0	(500.00)	1.12	98.75
1.0	(500.00)	1.5	(353.55)	1.07	97.63
1.5	(353.55)	2.0	(250.00)	0.87	96.55
2.0	(250.00)	2.5	(176.78)	0.78	95.69
2.5	(176.78)	3.0	(125.00)	0.92	94.91
3.0	(125.00)	3.5	(88.39)	1.53	93.98
3.5	(88.39)	4.0	(62.50)	2.95	92.46
4.0	(62.50)	4.5	(44.19)	5.27	89.51
4.5	(44.19)	5.0	(31.25)	7.78	84.24
5.0	(31.25)	5.5	(22.10)	9.37	76.46
5.5	(22.10)	6.0	(15.63)	9.68	67.08
6.0	(15.63)	6.5	(11.05)	9.2	57.4
6.5	(11.05)	7.0	(7.81)	8.49	48.2
7.0	(7.81)	7.5	(5.52)	7.77	39.72
7.5	(5.52)	8.0	(3.90)	7.08	31.94
8.0	(3.90)	8.5	(2.76)	6.36	24.87
8.5	(2.76)	9.0	(1.95)	5.57	18.51
9.0	(1.95)	9.5	(1.38)	4.67	12.95
9.5	(1.38)	10.0	(0.98)	3.64	8.27
10.0	(0.98)	10.5	(0.69)	2.53	4.63
10.5	(0.69)	11.0	(0.49)	1.46	2.1
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:05:41 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.95

D[4,3] = 38.86um = 4.69phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.68um = 8.54phi

D[v,0.5] = 15.79um = 5.99phi
D[v,0.84] = 45.19um = 4.47phi
D[v,0.95] = 75.48um = 3.73phi

Kurtosis = 83.68
Skewness = 8.63
Standard Deviation = 132.46 um = 2.92phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

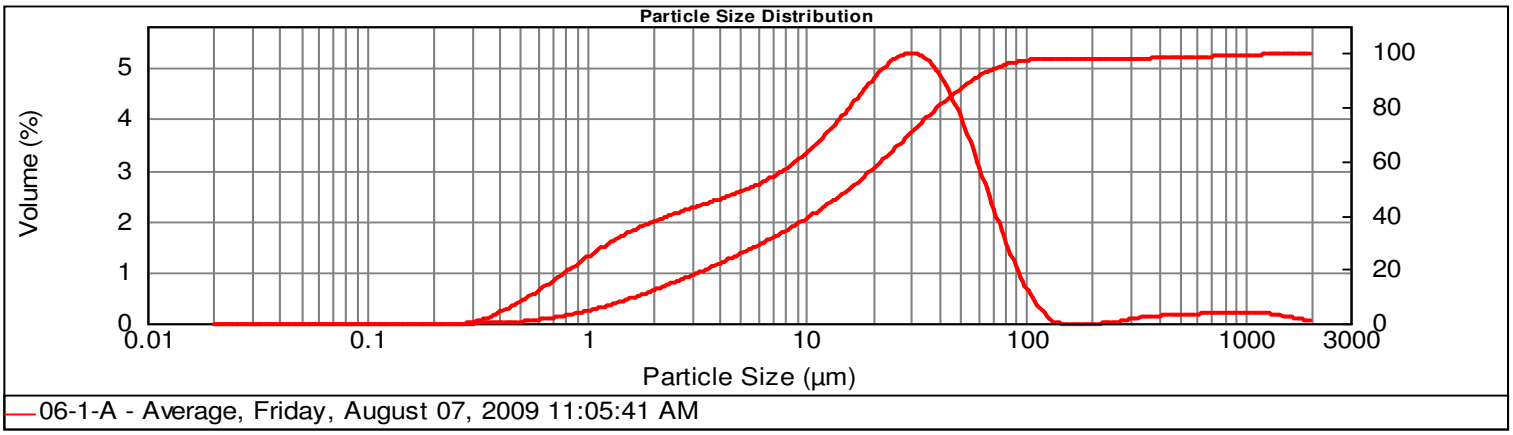
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12
% Fine Silt (2-3.9 um) = 9.63

d (0.1) : 1.706 **um**
d (0.5) : 15.785 **d (0.9) : 56.819**

Wentworth
% Clay (0-3.9 um) = 21.63
% Silt (3.91-31 um) = 50.02
% Coarse Silt (31 - 62.5 um) = 20.34
% Very Fine sand (62.5 - 125 um) = 5.92

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .51
% Coarse sand (500-1000 um) = .87
% Very Coarse sand (1000 - 2000 um) = .67



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.23	100
-0.5	(1414.21)	0.0	(1000.00)	0.44	99.77
0.0	(1000.00)	0.5	(707.10)	0.47	99.33
0.5	(707.10)	1.0	(500.00)	0.41	98.87
1.0	(500.00)	1.5	(353.55)	0.33	98.46
1.5	(353.55)	2.0	(250.00)	0.18	98.12
2.0	(250.00)	2.5	(176.78)	0	97.95
2.5	(176.78)	3.0	(125.00)	0.03	97.95
3.0	(125.00)	3.5	(88.39)	1.32	97.92
3.5	(88.39)	4.0	(62.50)	4.6	96.6
4.0	(62.50)	4.5	(44.19)	8.66	91.99
4.5	(44.19)	5.0	(31.25)	11.41	83.34
5.0	(31.25)	5.5	(22.10)	11.77	71.93
5.5	(22.10)	6.0	(15.63)	10.44	60.15
6.0	(15.63)	6.5	(11.05)	8.7	49.72
6.5	(11.05)	7.0	(7.81)	7.31	41.02
7.0	(7.81)	7.5	(5.52)	6.35	33.71
7.5	(5.52)	8.0	(3.90)	5.71	27.36
8.0	(3.90)	8.5	(2.76)	5.22	21.65
8.5	(2.76)	9.0	(1.95)	4.74	16.43
9.0	(1.95)	9.5	(1.38)	4.13	11.69
9.5	(1.38)	10.0	(0.98)	3.31	7.56
10.0	(0.98)	10.5	(0.69)	2.33	4.25
10.5	(0.69)	11.0	(0.49)	1.35	1.92
11.0	(0.49)	11.5	(0.35)	0.53	0.57
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:22:03 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.75

D[4,3] = 37.43um = 4.74phi
D[v,0.05] = 1.1um = 9.83phi
D[v,0.16] = 2.82um = 8.47phi

D[v,0.5] = 14.57um = 6.1phi
D[v,0.84] = 40.32um = 4.63phi
D[v,0.95] = 67.66um = 3.89phi

Kurtosis = 78.67
Skewness = 8.52
Standard Deviation = 139.68 um = 2.84phi

Inclusive SD (Sorting Coeff.) = 1.86 phi (Poorly Sorted)
Inclusive Kurtosis = .93 phi (Mesokurtic)

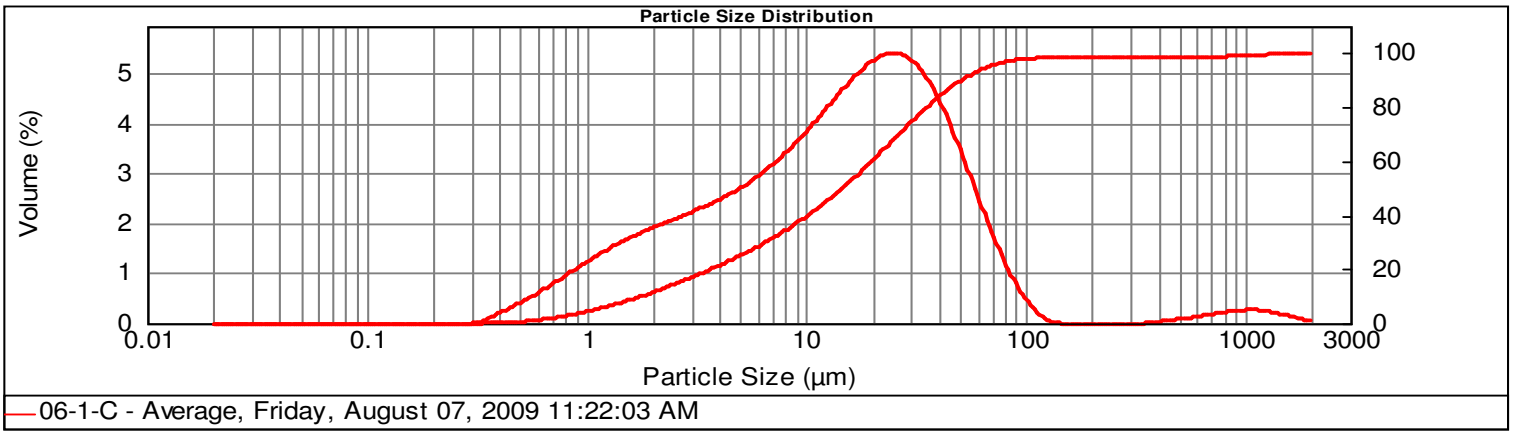
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.4 phi (Silt)

USGS
% Clay (0-2 um) = 11.43
% Fine Silt (2-3.9 um) = 9.47

d (0.1) : 1.779 **um**
d (0.5) : 14.569 **d (0.9) : 50.847**

Wentworth
% Clay (0-3.9 um) = 20.89
% Silt (3.91-31 um) = 54.71
% Coarse Silt (31 - 62.5 um) = 18.28
% Very Fine sand (62.5 - 125 um) = 4.37

% Fine sand (125-250 um) = .01
% Medium sand (250-500 um) = .09
% Coarse sand (500-1000 um) = .81
% Very Coarse sand (1000 - 2000 um) = .82



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.27	100
-0.5	(1414.21)	0.0	(1000.00)	0.55	99.73
0.0	(1000.00)	0.5	(707.10)	0.52	99.18
0.5	(707.10)	1.0	(500.00)	0.29	98.65
1.0	(500.00)	1.5	(353.55)	0.09	98.36
1.5	(353.55)	2.0	(250.00)	0	98.27
2.0	(250.00)	2.5	(176.78)	0	98.27
2.5	(176.78)	3.0	(125.00)	0.01	98.27
3.0	(125.00)	3.5	(88.39)	0.87	98.26
3.5	(88.39)	4.0	(62.50)	3.5	97.38
4.0	(62.50)	4.5	(44.19)	7.32	93.88
4.5	(44.19)	5.0	(31.25)	10.69	86.56
5.0	(31.25)	5.5	(22.10)	12.13	75.88
5.5	(22.10)	6.0	(15.63)	11.58	63.75
6.0	(15.63)	6.5	(11.05)	10.02	52.16
6.5	(11.05)	7.0	(7.81)	8.34	42.14
7.0	(7.81)	7.5	(5.52)	6.95	33.8
7.5	(5.52)	8.0	(3.90)	5.94	26.85

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.2	20.92
8.5	(2.76)	9.0	(1.95)	4.59	15.72
9.0	(1.95)	9.5	(1.38)	3.95	11.13
9.5	(1.38)	10.0	(0.98)	3.16	7.19
10.0	(0.98)	10.5	(0.69)	2.23	4.03
10.5	(0.69)	11.0	(0.49)	1.29	1.8
11.0	(0.49)	11.5	(0.35)	0.5	0.51
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:26:48 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.80

D[4,3] = 35.33um = 4.82phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.51um = 8.64phi

D[v,0.5] = 14.45um = 6.11phi
D[v,0.84] = 41.94um = 4.58phi
D[v,0.95] = 68.86um = 3.86phi

Kurtosis = 93.16
Skewness = 9.16
Standard Deviation = 126.77 um = 2.98phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

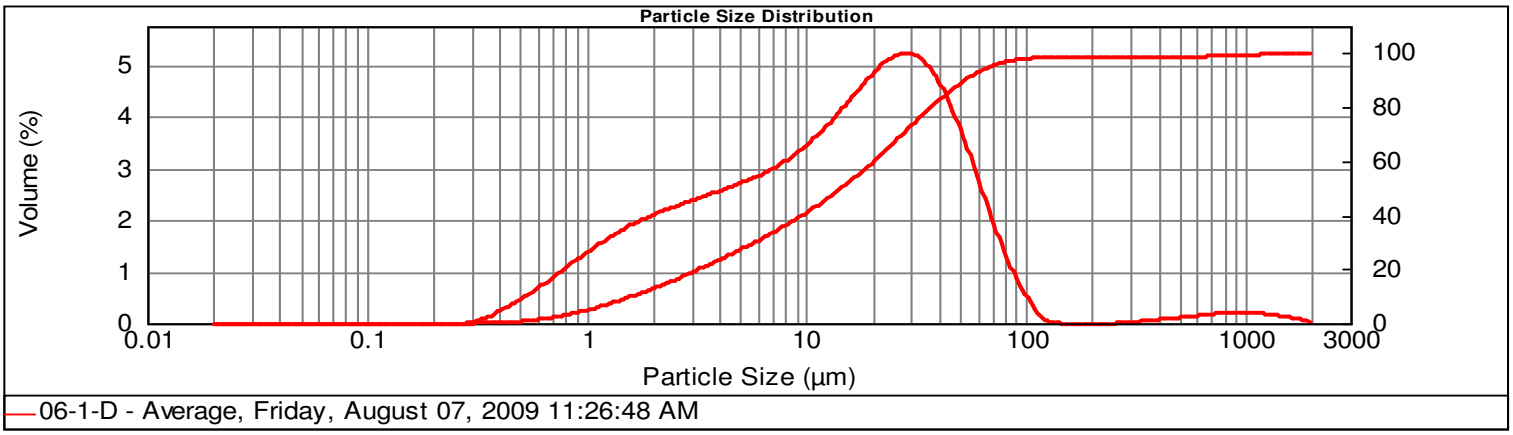
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 12.79
% Fine Silt (2-3.9 um) = 10.16

d (0.1) : 1.617 **um**
d (0.5) : 14.449 **d (0.9) : 52.537**

Wentworth
% Clay (0-3.9 um) = 22.95
% Silt (3.91-31 um) = 51.27
% Coarse Silt (31 - 62.5 um) = 19.29
% Very Fine sand (62.5 - 125 um) = 4.87

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .22
% Coarse sand (500-1000 um) = .78
% Very Coarse sand (1000 - 2000 um) = .63



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.42	99.79
0.0	(1000.00)	0.5	(707.10)	0.45	99.37
0.5	(707.10)	1.0	(500.00)	0.32	98.92
1.0	(500.00)	1.5	(353.55)	0.18	98.59
1.5	(353.55)	2.0	(250.00)	0.04	98.41
2.0	(250.00)	2.5	(176.78)	0	98.37
2.5	(176.78)	3.0	(125.00)	0	98.37
3.0	(125.00)	3.5	(88.39)	0.93	98.37
3.5	(88.39)	4.0	(62.50)	3.94	97.44
4.0	(62.50)	4.5	(44.19)	7.98	93.5
4.5	(44.19)	5.0	(31.25)	11.03	85.52
5.0	(31.25)	5.5	(22.10)	11.74	74.49
5.5	(22.10)	6.0	(15.63)	10.59	62.75
6.0	(15.63)	6.5	(11.05)	8.94	52.16
6.5	(11.05)	7.0	(7.81)	7.58	43.22
7.0	(7.81)	7.5	(5.52)	6.65	35.65
7.5	(5.52)	8.0	(3.90)	6.02	28.99

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.51	22.98
8.5	(2.76)	9.0	(1.95)	5	17.46
9.0	(1.95)	9.5	(1.38)	4.36	12.47
9.5	(1.38)	10.0	(0.98)	3.52	8.1
10.0	(0.98)	10.5	(0.69)	2.5	4.59
10.5	(0.69)	11.0	(0.49)	1.46	2.09
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-DM - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:53:11 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 28.33

D[4,3] = 68.01um = 3.88phi
D[v,0.05] = .75um = 10.39phi
D[v,0.16] = 1.39um = 9.49phi

D[v,0.5] = 4.53um = 7.78phi
D[v,0.84] = 17.62um = 5.83phi
D[v,0.95] = 613.72um = .7phi

Kurtosis = 20.49
Skewness = 4.47
Standard Deviation = 248.31 um = 2.01phi

Inclusive SD (Sorting Coeff.) = 2.38 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.61 phi (Very Leptokurtic)

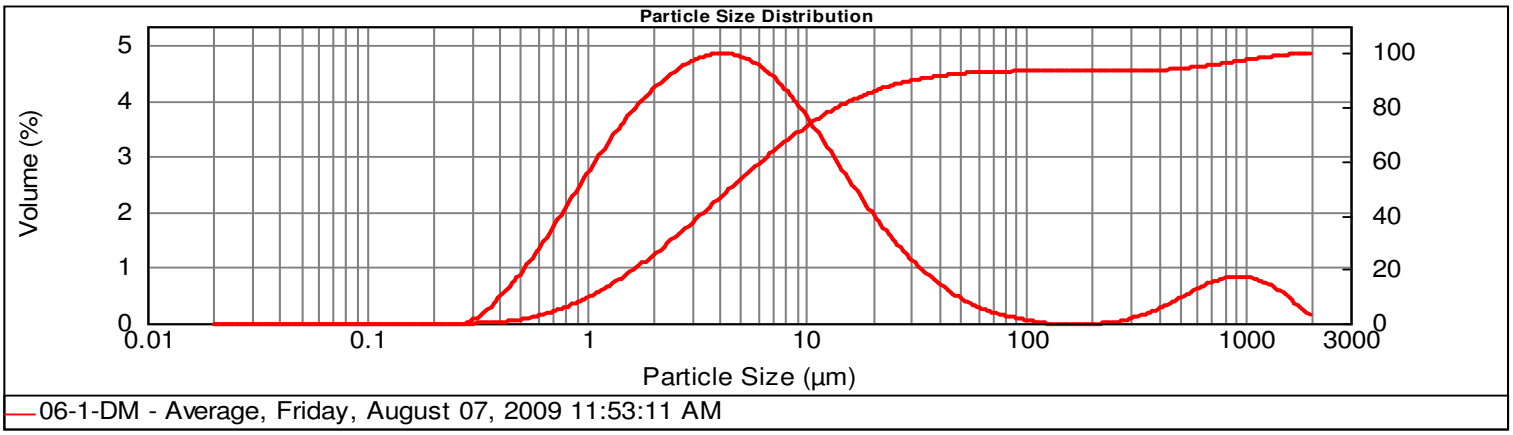
Inclusive Skewness = .27 (Fine Skewed)
Inclusive Mean = 7.7 phi (Silt)

USGS
% Clay (0-2 um) = 25.13
% Fine Silt (2-3.9 um) = 20.09

d (0.1) : 1.039 **um**
d (0.5) : 4.535 **d (0.9) : 30.691**

Wentworth
% Clay (0-3.9 um) = 45.22
% Silt (3.91-31 um) = 44.85
% Coarse Silt (31 - 62.5 um) = 2.84
% Very Fine sand (62.5 - 125 um) = .49

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .86
% Coarse sand (500-1000 um) = 3.21
% Very Coarse sand (1000 - 2000 um) = 2.52



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.84	100
-0.5	(1414.21)	0.0	(1000.00)	1.68	99.16
0.0	(1000.00)	0.5	(707.10)	1.84	97.48
0.5	(707.10)	1.0	(500.00)	1.37	95.64
1.0	(500.00)	1.5	(353.55)	0.68	94.27
1.5	(353.55)	2.0	(250.00)	0.19	93.6
2.0	(250.00)	2.5	(176.78)	0	93.41
2.5	(176.78)	3.0	(125.00)	0	93.41
3.0	(125.00)	3.5	(88.39)	0.1	93.41
3.5	(88.39)	4.0	(62.50)	0.39	93.31
4.0	(62.50)	4.5	(44.19)	0.93	92.91
4.5	(44.19)	5.0	(31.25)	1.85	91.98
5.0	(31.25)	5.5	(22.10)	3.16	90.13
5.5	(22.10)	6.0	(15.63)	4.87	86.97
6.0	(15.63)	6.5	(11.05)	6.87	82.1
6.5	(11.05)	7.0	(7.81)	8.8	75.23
7.0	(7.81)	7.5	(5.52)	10.24	66.43
7.5	(5.52)	8.0	(3.90)	10.92	56.19
8.0	(3.90)	8.5	(2.76)	10.79	45.27
8.5	(2.76)	9.0	(1.95)	10	34.48
9.0	(1.95)	9.5	(1.38)	8.68	24.49
9.5	(1.38)	10.0	(0.98)	6.9	15.81
10.0	(0.98)	10.5	(0.69)	4.83	8.91
10.5	(0.69)	11.0	(0.49)	2.81	4.08
11.0	(0.49)	11.5	(0.35)	1.15	1.27
11.5	(0.35)	12.0	(0.24)	0.12	0.12
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:31:10 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.16

D[4,3] = 39.19um = 4.67phi
D[v,0.05] = 1.04um = 9.9phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 15.86um = 5.98phi
D[v,0.84] = 46.34um = 4.43phi
D[v,0.95] = 77.05um = 3.7phi

Kurtosis = 83
Skewness = 8.67
Standard Deviation = 136.21 um = 2.88phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

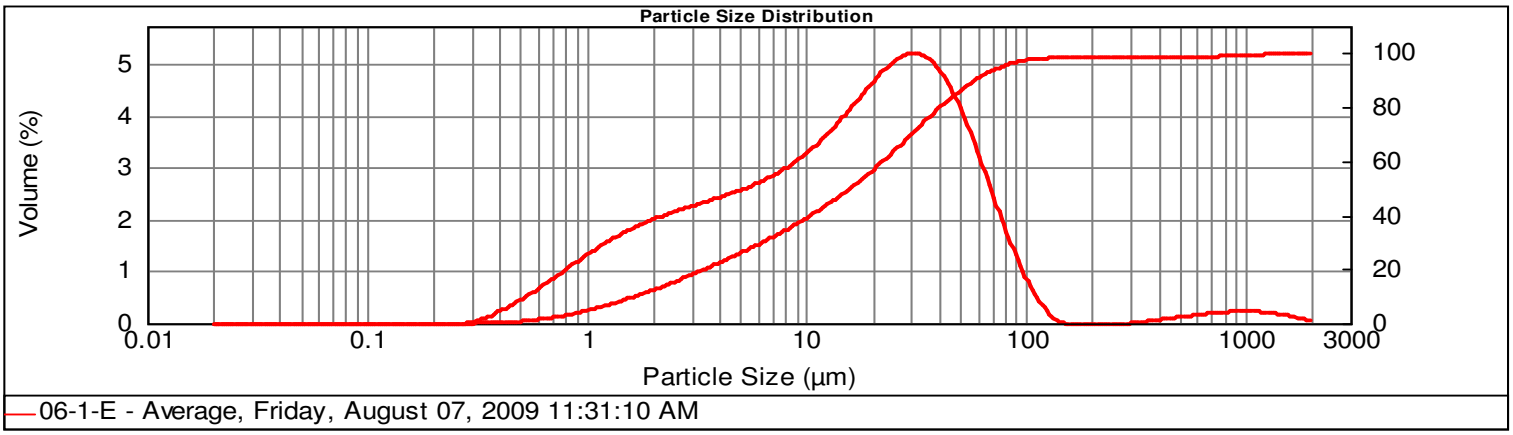
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.27
% Fine Silt (2-3.9 um) = 9.64

d (0.1) : 1.670 **um**
d (0.5) : 15.865 **d (0.9) : 58.306**

Wentworth
% Clay (0-3.9 um) = 21.91
% Silt (3.91-31 um) = 49.05
% Coarse Silt (31 - 62.5 um) = 20.53
% Very Fine sand (62.5 - 125 um) = 6.67

% Fine sand (125-250 um) = .07
% Medium sand (250-500 um) = .19
% Coarse sand (500-1000 um) = .84
% Very Coarse sand (1000 - 2000 um) = .74



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.26	100
-0.5	(1414.21)	0.0	(1000.00)	0.48	99.74
0.0	(1000.00)	0.5	(707.10)	0.49	99.26
0.5	(707.10)	1.0	(500.00)	0.35	98.77
1.0	(500.00)	1.5	(353.55)	0.17	98.42
1.5	(353.55)	2.0	(250.00)	0.01	98.25
2.0	(250.00)	2.5	(176.78)	0	98.24
2.5	(176.78)	3.0	(125.00)	0.07	98.24
3.0	(125.00)	3.5	(88.39)	1.65	98.16
3.5	(88.39)	4.0	(62.50)	5.02	96.52
4.0	(62.50)	4.5	(44.19)	8.9	91.49
4.5	(44.19)	5.0	(31.25)	11.36	82.59
5.0	(31.25)	5.5	(22.10)	11.51	71.23
5.5	(22.10)	6.0	(15.63)	10.13	59.72
6.0	(15.63)	6.5	(11.05)	8.48	49.59
6.5	(11.05)	7.0	(7.81)	7.18	41.11
7.0	(7.81)	7.5	(5.52)	6.3	33.93
7.5	(5.52)	8.0	(3.90)	5.69	27.63

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.22	21.94
8.5	(2.76)	9.0	(1.95)	4.75	16.71
9.0	(1.95)	9.5	(1.38)	4.16	11.96
9.5	(1.38)	10.0	(0.98)	3.37	7.8
10.0	(0.98)	10.5	(0.69)	2.4	4.43
10.5	(0.69)	11.0	(0.49)	1.41	2.03
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:35:30 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.80

D[4,3] = 33.64um = 4.89phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.78um = 8.49phi

D[v,0.5] = 17.19um = 5.86phi
D[v,0.84] = 49.17um = 4.35phi
D[v,0.95] = 79.36um = 3.66phi

Kurtosis = 110.11
Skewness = 9.91
Standard Deviation = 95.7 um = 3.39phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

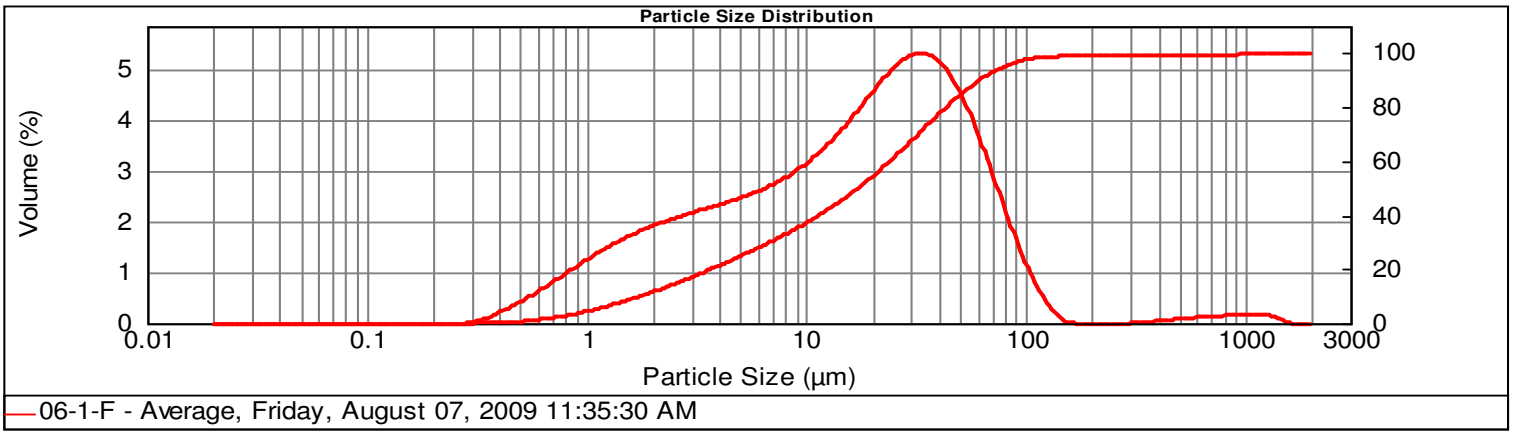
Inclusive Skewness = -0.28 (Coarse Skewed)
Inclusive Mean = 6.23 phi (Silt)

USGS
% Clay (0-2 um) = 11.64
% Fine Silt (2-3.9 um) = 9.24

d (0.1) : 1.748 **um**
d (0.5) : 17.185 **d (0.9) : 61.345**

Wentworth
% Clay (0-3.9 um) = 20.88
% Silt (3.91-31 um) = 47.72
% Coarse Silt (31 - 62.5 um) = 21.84
% Very Fine sand (62.5 - 125 um) = 8.24

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .13
% Coarse sand (500-1000 um) = .59
% Very Coarse sand (1000 - 2000 um) = .37



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.03	100
-0.5	(1414.21)	0.0	(1000.00)	0.34	99.97
0.0	(1000.00)	0.5	(707.10)	0.34	99.63
0.5	(707.10)	1.0	(500.00)	0.25	99.29
1.0	(500.00)	1.5	(353.55)	0.12	99.04
1.5	(353.55)	2.0	(250.00)	0.01	98.92
2.0	(250.00)	2.5	(176.78)	0	98.91
2.5	(176.78)	3.0	(125.00)	0.23	98.91
3.0	(125.00)	3.5	(88.39)	2.26	98.68
3.5	(88.39)	4.0	(62.50)	5.98	96.42
4.0	(62.50)	4.5	(44.19)	9.77	90.44
4.5	(44.19)	5.0	(31.25)	11.79	80.67
5.0	(31.25)	5.5	(22.10)	11.51	68.88
5.5	(22.10)	6.0	(15.63)	9.89	57.36
6.0	(15.63)	6.5	(11.05)	8.17	47.47
6.5	(11.05)	7.0	(7.81)	6.89	39.3
7.0	(7.81)	7.5	(5.52)	6.04	32.41
7.5	(5.52)	8.0	(3.90)	5.47	26.37

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.01	20.9
8.5	(2.76)	9.0	(1.95)	4.55	15.89
9.0	(1.95)	9.5	(1.38)	3.97	11.34
9.5	(1.38)	10.0	(0.98)	3.2	7.37
10.0	(0.98)	10.5	(0.69)	2.27	4.17
10.5	(0.69)	11.0	(0.49)	1.33	1.9
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:39:50 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.28

D[4,3] = 35.86um = 4.8phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.68um = 8.55phi

D[v,0.5] = 16.81um = 5.89phi
D[v,0.84] = 48.29um = 4.37phi
D[v,0.95] = 78.9um = 3.66phi

Kurtosis = 106.3
Skewness = 9.63
Standard Deviation = 111.74 um = 3.16phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

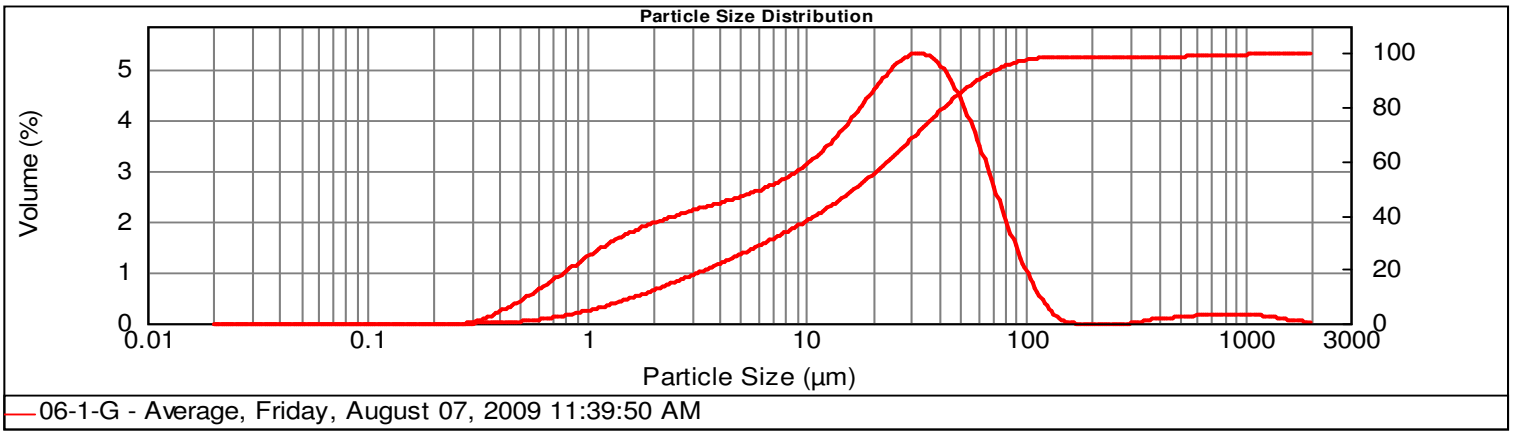
Inclusive Skewness = -0.28 (Coarse Skewed)
Inclusive Mean = 6.27 phi (Silt)

USGS
% Clay (0-2 um) = 12.08
% Fine Silt (2-3.9 um) = 9.44

d (0.1) : 1.692 **um**
d (0.5) : 16.808 **d (0.9) : 60.411**

Wentworth
% Clay (0-3.9 um) = 21.52
% Silt (3.91-31 um) = 47.72
% Coarse Silt (31 - 62.5 um) = 21.53
% Very Fine sand (62.5 - 125 um) = 7.61

% Fine sand (125-250 um) = .18
% Medium sand (250-500 um) = .23
% Coarse sand (500-1000 um) = .73
% Very Coarse sand (1000 - 2000 um) = .46



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.13	100
-0.5	(1414.21)	0.0	(1000.00)	0.33	99.87
0.0	(1000.00)	0.5	(707.10)	0.4	99.54
0.5	(707.10)	1.0	(500.00)	0.34	99.14
1.0	(500.00)	1.5	(353.55)	0.21	98.8
1.5	(353.55)	2.0	(250.00)	0.02	98.59
2.0	(250.00)	2.5	(176.78)	0	98.57
2.5	(176.78)	3.0	(125.00)	0.18	98.57
3.0	(125.00)	3.5	(88.39)	2	98.39
3.5	(88.39)	4.0	(62.50)	5.61	96.38
4.0	(62.50)	4.5	(44.19)	9.51	90.77
4.5	(44.19)	5.0	(31.25)	11.74	81.26
5.0	(31.25)	5.5	(22.10)	11.55	69.52
5.5	(22.10)	6.0	(15.63)	9.9	57.97
6.0	(15.63)	6.5	(11.05)	8.12	48.07
6.5	(11.05)	7.0	(7.81)	6.84	39.95
7.0	(7.81)	7.5	(5.52)	6.05	33.11
7.5	(5.52)	8.0	(3.90)	5.52	27.07

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.1	21.54
8.5	(2.76)	9.0	(1.95)	4.66	16.44
9.0	(1.95)	9.5	(1.38)	4.1	11.78
9.5	(1.38)	10.0	(0.98)	3.32	7.68
10.0	(0.98)	10.5	(0.69)	2.37	4.36
10.5	(0.69)	11.0	(0.49)	1.39	1.99
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:44:15 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.78

D[4,3] = 33.24um = 4.91phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.78um = 8.49phi

D[v,0.5] = 17.41um = 5.84phi
D[v,0.84] = 49.41um = 4.34phi
D[v,0.95] = 79.43um = 3.65phi

Kurtosis = 103.5
Skewness = 9.56
Standard Deviation = 89.08 um = 3.49phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

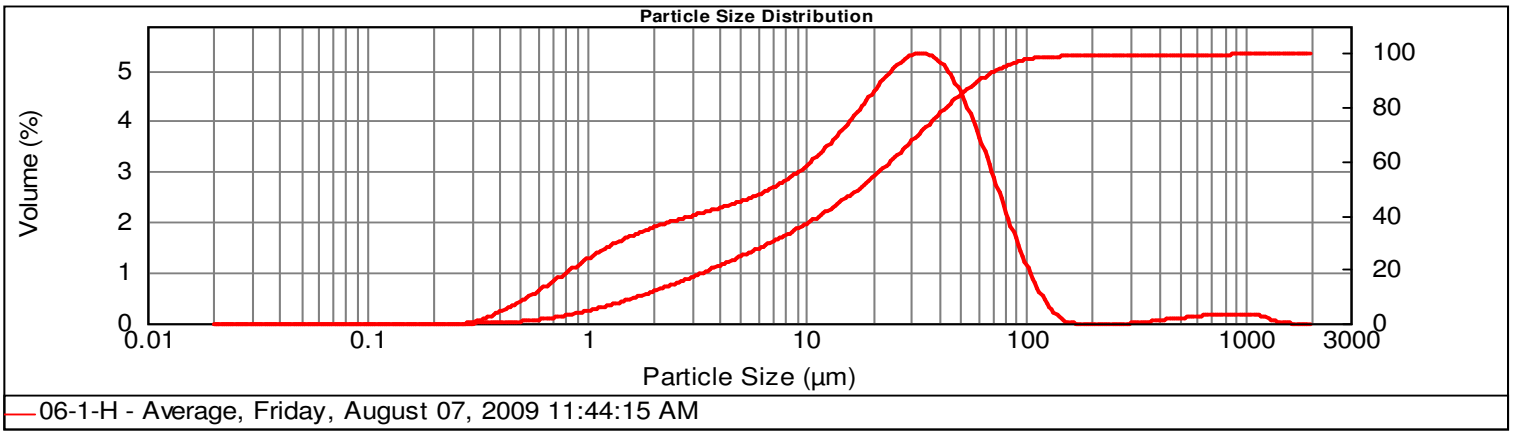
Inclusive Skewness = -0.29 (Coarse Skewed)
Inclusive Mean = 6.23 phi (Silt)

USGS
% Clay (0-2 um) = 11.73
% Fine Silt (2-3.9 um) = 9.08

d (0.1) : 1.732 **um**
d (0.5) : 17.407 **d (0.9) : 61.525**

Wentworth
% Clay (0-3.9 um) = 20.81
% Silt (3.91-31 um) = 47.5
% Coarse Silt (31 - 62.5 um) = 22.06
% Very Fine sand (62.5 - 125 um) = 8.29

% Fine sand (125-250 um) = .22
% Medium sand (250-500 um) = .16
% Coarse sand (500-1000 um) = .69
% Very Coarse sand (1000 - 2000 um) = .27



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.27	100
0.0	(1000.00)	0.5	(707.10)	0.39	99.73
0.5	(707.10)	1.0	(500.00)	0.3	99.34
1.0	(500.00)	1.5	(353.55)	0.15	99.04
1.5	(353.55)	2.0	(250.00)	0.01	98.89
2.0	(250.00)	2.5	(176.78)	0	98.88
2.5	(176.78)	3.0	(125.00)	0.22	98.88
3.0	(125.00)	3.5	(88.39)	2.25	98.67
3.5	(88.39)	4.0	(62.50)	6.04	96.41
4.0	(62.50)	4.5	(44.19)	9.89	90.37
4.5	(44.19)	5.0	(31.25)	11.89	80.48
5.0	(31.25)	5.5	(22.10)	11.56	68.59
5.5	(22.10)	6.0	(15.63)	9.92	57.03
6.0	(15.63)	6.5	(11.05)	8.17	47.11
6.5	(11.05)	7.0	(7.81)	6.83	38.95
7.0	(7.81)	7.5	(5.52)	5.93	32.12
7.5	(5.52)	8.0	(3.90)	5.35	26.18

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.91	20.84
8.5	(2.76)	9.0	(1.95)	4.49	15.92
9.0	(1.95)	9.5	(1.38)	3.96	11.44
9.5	(1.38)	10.0	(0.98)	3.22	7.48
10.0	(0.98)	10.5	(0.69)	2.3	4.26
10.5	(0.69)	11.0	(0.49)	1.36	1.96
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 06-1-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:48:38 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.20

D[4,3] = 43.79um = 4.51phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 15.29um = 6.03phi
D[v,0.84] = 44.64um = 4.49phi
D[v,0.95] = 75.51um = 3.73phi

Kurtosis = 58.33
Skewness = 7.38
Standard Deviation = 157.43 um = 2.67phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

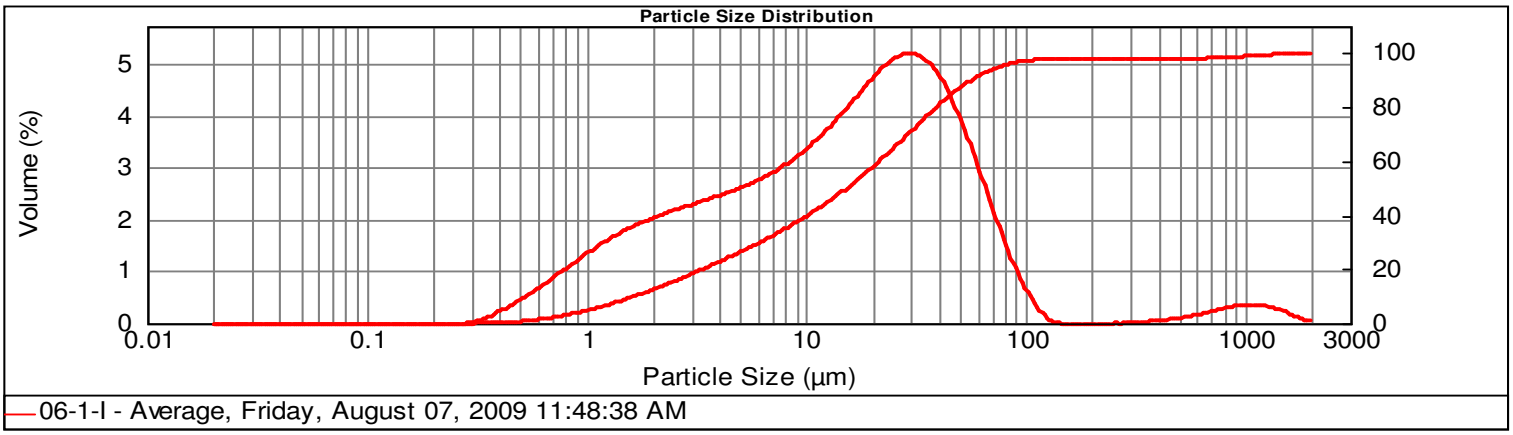
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.48
% Fine Silt (2-3.9 um) = 9.78

d (0.1) : 1.647 **um**
d (0.5) : 15.293 **d (0.9) : 56.348**

Wentworth
% Clay (0-3.9 um) = 22.26
% Silt (3.91-31 um) = 50
% Coarse Silt (31 - 62.5 um) = 19.85
% Very Fine sand (62.5 - 125 um) = 5.59

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .15
% Coarse sand (500-1000 um) = 1.05
% Very Coarse sand (1000 - 2000 um) = 1.07



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.32	100
-0.5	(1414.21)	0.0	(1000.00)	0.75	99.68
0.0	(1000.00)	0.5	(707.10)	0.69	98.93
0.5	(707.10)	1.0	(500.00)	0.36	98.24
1.0	(500.00)	1.5	(353.55)	0.14	97.88
1.5	(353.55)	2.0	(250.00)	0.02	97.74
2.0	(250.00)	2.5	(176.78)	0	97.72
2.5	(176.78)	3.0	(125.00)	0.02	97.72
3.0	(125.00)	3.5	(88.39)	1.2	97.7
3.5	(88.39)	4.0	(62.50)	4.4	96.51
4.0	(62.50)	4.5	(44.19)	8.4	92.11
4.5	(44.19)	5.0	(31.25)	11.17	83.71
5.0	(31.25)	5.5	(22.10)	11.6	72.53
5.5	(22.10)	6.0	(15.63)	10.35	60.93
6.0	(15.63)	6.5	(11.05)	8.7	50.59
6.5	(11.05)	7.0	(7.81)	7.37	41.88
7.0	(7.81)	7.5	(5.52)	6.44	34.51
7.5	(5.52)	8.0	(3.90)	5.79	28.08

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.29	22.29
8.5	(2.76)	9.0	(1.95)	4.82	16.99
9.0	(1.95)	9.5	(1.38)	4.24	12.17
9.5	(1.38)	10.0	(0.98)	3.44	7.93
10.0	(0.98)	10.5	(0.69)	2.45	4.49
10.5	(0.69)	11.0	(0.49)	1.43	2.05
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:00:14 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 26.72

D[4,3] = 87.39um = 3.52phi
D[v,0.05] = .84um = 10.22phi
D[v,0.16] = 1.71um = 9.19phi

D[v,0.5] = 8.03um = 6.96phi
D[v,0.84] = 50.9um = 4.3phi
D[v,0.95] = 685.75um = .54phi

Kurtosis = 16.88
Skewness = 4.03
Standard Deviation = 259.22 um = 1.95phi

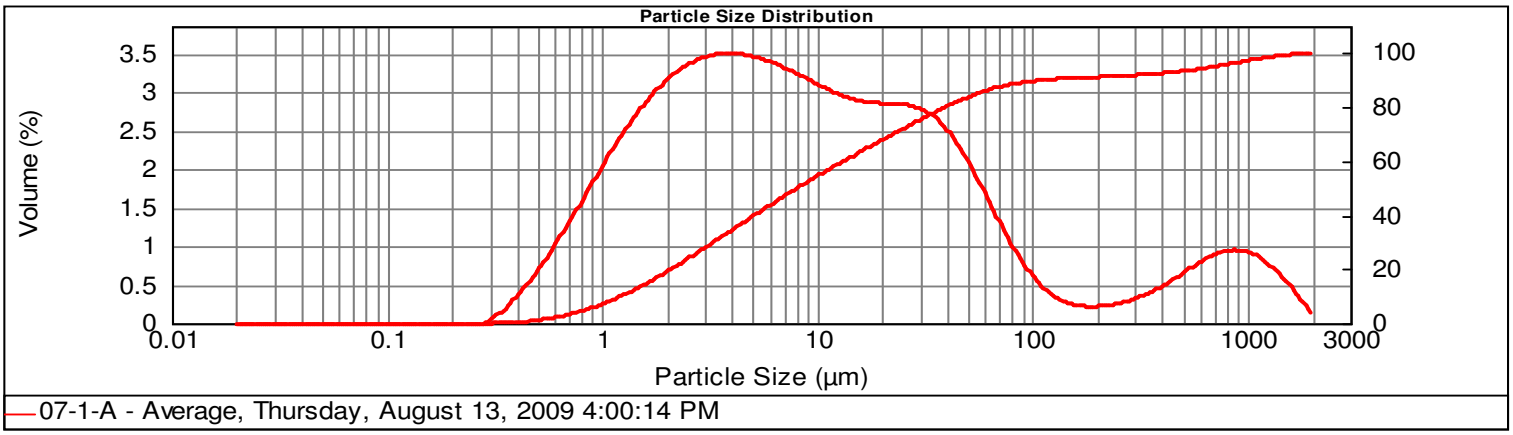
Inclusive SD (Sorting Coeff.) = 2.69 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.14 phi (Leptokurtic)

Inclusive Skewness = .21 (Fine Skewed)
Inclusive Mean = 6.82 phi (Silt)

USGS
% Clay (0-2 um) = 19.12
% Fine Silt (2-3.9 um) = 14.81

d (0.1) : 1.220 **um**
d (0.5) : 8.032 **d (0.9) : 107.941**

Wentworth
% Clay (0-3.9 um) = 33.92
% Silt (3.91-31 um) = 42.03
% Coarse Silt (31 - 62.5 um) = 10.5
% Very Fine sand (62.5 - 125 um) = 3.95
% Fine sand (125-250 um) = 1.11
% Medium sand (250-500 um) = 1.89
% Coarse sand (500-1000 um) = 3.89
% Very Coarse sand (1000 - 2000 um) = 2.7



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.88	100
-0.5	(1414.21)	0.0	(1000.00)	1.82	99.12
0.0	(1000.00)	0.5	(707.10)	2.13	97.3
0.5	(707.10)	1.0	(500.00)	1.77	95.18
1.0	(500.00)	1.5	(353.55)	1.17	93.41
1.5	(353.55)	2.0	(250.00)	0.72	92.24
2.0	(250.00)	2.5	(176.78)	0.52	91.52
2.5	(176.78)	3.0	(125.00)	0.59	91
3.0	(125.00)	3.5	(88.39)	1.26	90.41
3.5	(88.39)	4.0	(62.50)	2.69	89.15
4.0	(62.50)	4.5	(44.19)	4.49	86.46
4.5	(44.19)	5.0	(31.25)	5.86	81.96
5.0	(31.25)	5.5	(22.10)	6.39	76.1
5.5	(22.10)	6.0	(15.63)	6.48	69.71
6.0	(15.63)	6.5	(11.05)	6.69	63.23
6.5	(11.05)	7.0	(7.81)	7.13	56.54
7.0	(7.81)	7.5	(5.52)	7.58	49.41
7.5	(5.52)	8.0	(3.90)	7.87	41.83

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	7.87	33.96
8.5	(2.76)	9.0	(1.95)	7.46	26.09
9.0	(1.95)	9.5	(1.38)	6.57	18.63
9.5	(1.38)	10.0	(0.98)	5.26	12.06
10.0	(0.98)	10.5	(0.69)	3.69	6.8
10.5	(0.69)	11.0	(0.49)	2.14	3.11
11.0	(0.49)	11.5	(0.35)	0.87	0.96
11.5	(0.35)	12.0	(0.24)	0.09	0.09
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:05:54 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 33.30

D[4,3] = 100.66um = 3.31phi
D[v,0.05] = .8um = 10.3phi
D[v,0.16] = 1.59um = 9.29phi

D[v,0.5] = 7.3um = 7.1phi
D[v,0.84] = 57.9um = 4.11phi
D[v,0.95] = 796.5um = .33phi

Kurtosis = 13.44
Skewness = 3.64
Standard Deviation = 283.37 um = 1.82phi

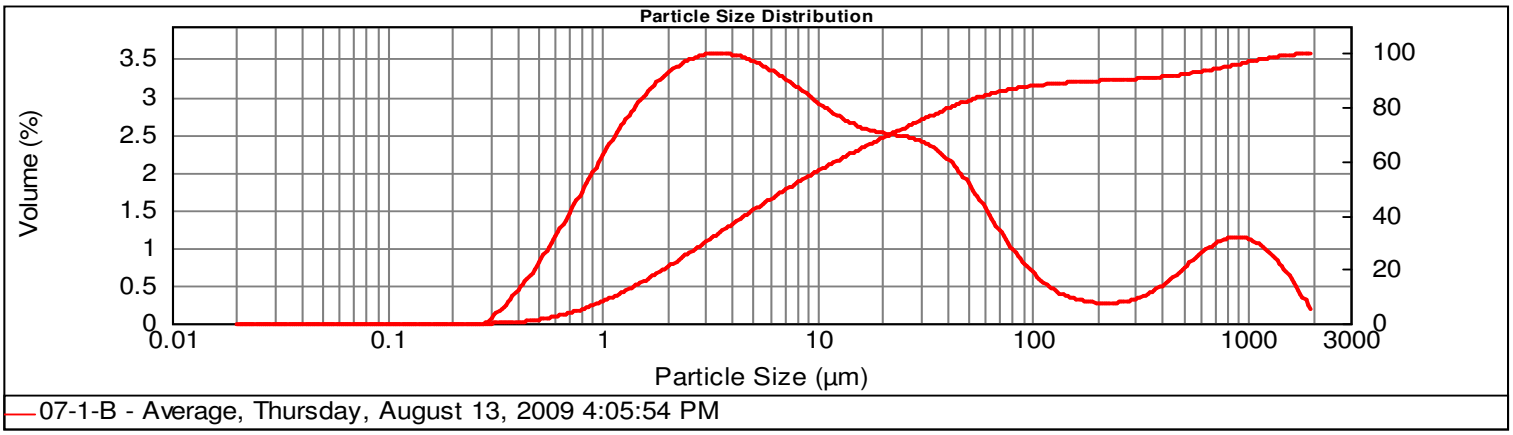
Inclusive SD (Sorting Coeff.) = 2.81 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.13 phi (Leptokurtic)

Inclusive Skewness = .26 (Fine Skewed)
Inclusive Mean = 6.83 phi (Silt)

USGS
% Clay (0-2 um) = 20.72
% Fine Silt (2-3.9 um) = 15.28

d (0.1) : 1.144 **um**
d (0.5) : 7.296 **d (0.9) : 229.979**

Wentworth
% Clay (0-3.9 um) = 35.99
% Silt (3.91-31 um) = 39.54
% Coarse Silt (31 - 62.5 um) = 9.22
% Very Fine sand (62.5 - 125 um) = 3.97
% Fine sand (125-250 um) = 1.41
% Medium sand (250-500 um) = 1.98
% Coarse sand (500-1000 um) = 4.56
% Very Coarse sand (1000 - 2000 um) = 3.31



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	1.09	100
-0.5	(1414.21)	0.0	(1000.00)	2.22	98.91
0.0	(1000.00)	0.5	(707.10)	2.54	96.69
0.5	(707.10)	1.0	(500.00)	2.03	94.15
1.0	(500.00)	1.5	(353.55)	1.24	92.12
1.5	(353.55)	2.0	(250.00)	0.73	90.88
2.0	(250.00)	2.5	(176.78)	0.61	90.15
2.5	(176.78)	3.0	(125.00)	0.8	89.53
3.0	(125.00)	3.5	(88.39)	1.41	88.74
3.5	(88.39)	4.0	(62.50)	2.57	87.33
4.0	(62.50)	4.5	(44.19)	4	84.76
4.5	(44.19)	5.0	(31.25)	5.1	80.76
5.0	(31.25)	5.5	(22.10)	5.57	75.66
5.5	(22.10)	6.0	(15.63)	5.75	70.1
6.0	(15.63)	6.5	(11.05)	6.14	64.34
6.5	(11.05)	7.0	(7.81)	6.78	58.21
7.0	(7.81)	7.5	(5.52)	7.45	51.42
7.5	(5.52)	8.0	(3.90)	7.94	43.97

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	8.07	36.03
8.5	(2.76)	9.0	(1.95)	7.75	27.96
9.0	(1.95)	9.5	(1.38)	6.95	20.21
9.5	(1.38)	10.0	(0.98)	5.66	13.26
10.0	(0.98)	10.5	(0.69)	4.05	7.59
10.5	(0.69)	11.0	(0.49)	2.41	3.54
11.0	(0.49)	11.5	(0.35)	1.02	1.14
11.5	(0.35)	12.0	(0.24)	0.12	0.12
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:10:44 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.46

D[4,3] = 39.87um = 4.65phi
D[v,0.05] = 1.01um = 9.96phi
D[v,0.16] = 2.46um = 8.67phi

D[v,0.5] = 15.53um = 6.01phi
D[v,0.84] = 49.26um = 4.34phi
D[v,0.95] = 84.73um = 3.56phi

Kurtosis = 78.6
Skewness = 8.28
Standard Deviation = 127.62 um = 2.97phi

Inclusive SD (Sorting Coeff.) = 2.05 phi (Very Poorly Sorted)
Inclusive Kurtosis = .85 phi (Platykurtic)

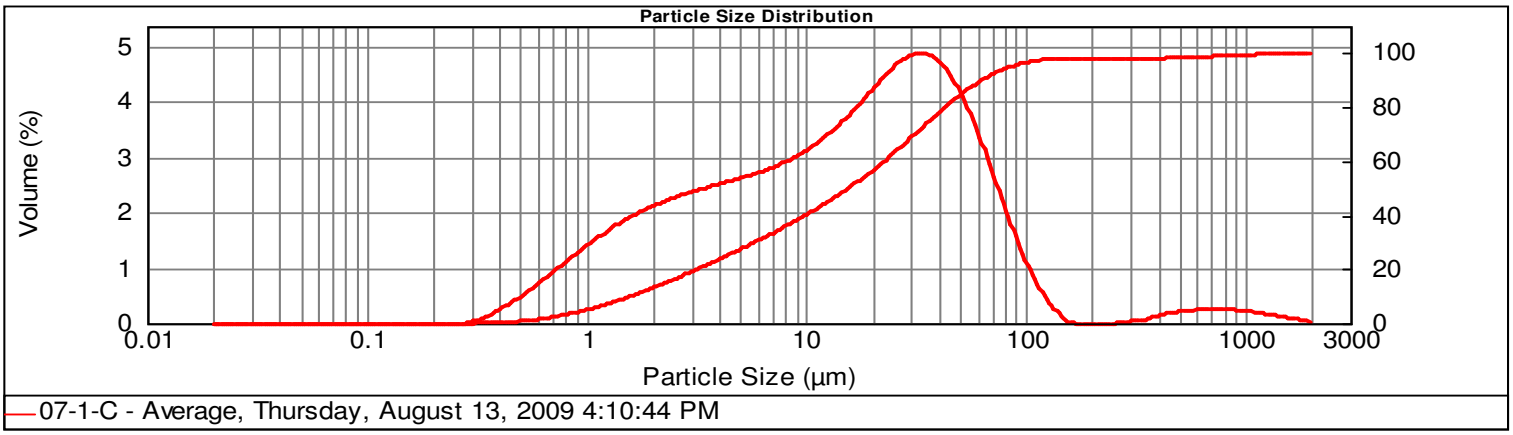
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 13.05
% Fine Silt (2-3.9 um) = 10.15

d (0.1) : 1.589 **um**
d (0.5) : 15.531 **d (0.9) : 62.768**

Wentworth
% Clay (0-3.9 um) = 23.2
% Silt (3.91-31 um) = 46.55
% Coarse Silt (31 - 62.5 um) = 20.16
% Very Fine sand (62.5 - 125 um) = 7.75

% Fine sand (125-250 um) = .28
% Medium sand (250-500 um) = .4
% Coarse sand (500-1000 um) = 1.09
% Very Coarse sand (1000 - 2000 um) = .57



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.4	99.83
0.0	(1000.00)	0.5	(707.10)	0.55	99.43
0.5	(707.10)	1.0	(500.00)	0.54	98.88
1.0	(500.00)	1.5	(353.55)	0.34	98.34
1.5	(353.55)	2.0	(250.00)	0.06	98
2.0	(250.00)	2.5	(176.78)	0	97.94
2.5	(176.78)	3.0	(125.00)	0.28	97.94
3.0	(125.00)	3.5	(88.39)	2.18	97.66
3.5	(88.39)	4.0	(62.50)	5.57	95.48
4.0	(62.50)	4.5	(44.19)	9.03	89.91
4.5	(44.19)	5.0	(31.25)	10.87	80.87
5.0	(31.25)	5.5	(22.10)	10.61	70.01
5.5	(22.10)	6.0	(15.63)	9.25	59.39
6.0	(15.63)	6.5	(11.05)	7.87	50.15
6.5	(11.05)	7.0	(7.81)	6.91	42.28
7.0	(7.81)	7.5	(5.52)	6.29	35.37
7.5	(5.52)	8.0	(3.90)	5.85	29.08
8.0	(3.90)	8.5	(2.76)	5.48	23.23
8.5	(2.76)	9.0	(1.95)	5.03	17.75
9.0	(1.95)	9.5	(1.38)	4.42	12.72
9.5	(1.38)	10.0	(0.98)	3.58	8.3
10.0	(0.98)	10.5	(0.69)	2.55	4.72
10.5	(0.69)	11.0	(0.49)	1.5	2.17
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:15:18 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.84

D[4,3] = 40.16um = 4.64phi
D[v,0.05] = 1.04um = 9.92phi
D[v,0.16] = 2.57um = 8.6phi

D[v,0.5] = 15.64um = 6phi
D[v,0.84] = 46.52um = 4.43phi
D[v,0.95] = 80.04um = 3.64phi

Kurtosis = 75.52
Skewness = 8.17
Standard Deviation = 133.66 um = 2.9phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

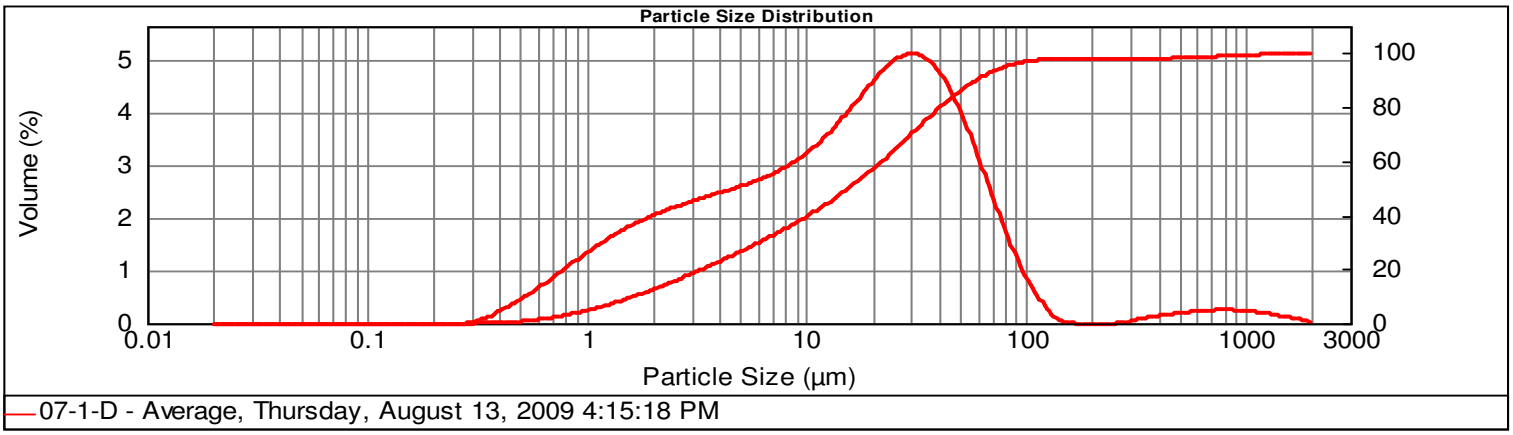
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 12.5
% Fine Silt (2-3.9 um) = 9.89

d (0.1) : 1.647 **um**
d (0.5) : 15.640 **d (0.9) : 59.119**

Wentworth
% Clay (0-3.9 um) = 22.38
% Silt (3.91-31 um) = 48.72
% Coarse Silt (31 - 62.5 um) = 20.03
% Very Fine sand (62.5 - 125 um) = 6.56

% Fine sand (125-250 um) = .13
% Medium sand (250-500 um) = .44
% Coarse sand (500-1000 um) = 1.08
% Very Coarse sand (1000 - 2000 um) = .65



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.2	100
-0.5	(1414.21)	0.0	(1000.00)	0.45	99.8
0.0	(1000.00)	0.5	(707.10)	0.56	99.35
0.5	(707.10)	1.0	(500.00)	0.51	98.78
1.0	(500.00)	1.5	(353.55)	0.35	98.27
1.5	(353.55)	2.0	(250.00)	0.09	97.92
2.0	(250.00)	2.5	(176.78)	0	97.83
2.5	(176.78)	3.0	(125.00)	0.13	97.83
3.0	(125.00)	3.5	(88.39)	1.69	97.7
3.5	(88.39)	4.0	(62.50)	4.87	96.01
4.0	(62.50)	4.5	(44.19)	8.63	91.14
4.5	(44.19)	5.0	(31.25)	11.14	82.51
5.0	(31.25)	5.5	(22.10)	11.38	71.38
5.5	(22.10)	6.0	(15.63)	10.02	60
6.0	(15.63)	6.5	(11.05)	8.35	49.97
6.5	(11.05)	7.0	(7.81)	7.1	41.62
7.0	(7.81)	7.5	(5.52)	6.32	34.52
7.5	(5.52)	8.0	(3.90)	5.8	28.21

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.36	22.41
8.5	(2.76)	9.0	(1.95)	4.87	17.05
9.0	(1.95)	9.5	(1.38)	4.26	12.18
9.5	(1.38)	10.0	(0.98)	3.43	7.92
10.0	(0.98)	10.5	(0.69)	2.44	4.49
10.5	(0.69)	11.0	(0.49)	1.43	2.05
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-DM - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:41:02 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.62

D[4,3] = 107.67um = 3.22phi
D[v,0.05] = .87um = 10.17phi
D[v,0.16] = 1.76um = 9.15phi

D[v,0.5] = 8.22um = 6.93phi
D[v,0.84] = 198.91um = 2.33phi
D[v,0.95] = 610.69um = .71phi

Kurtosis = 13.91
Skewness = 3.44
Standard Deviation = 238.62 um = 2.07phi

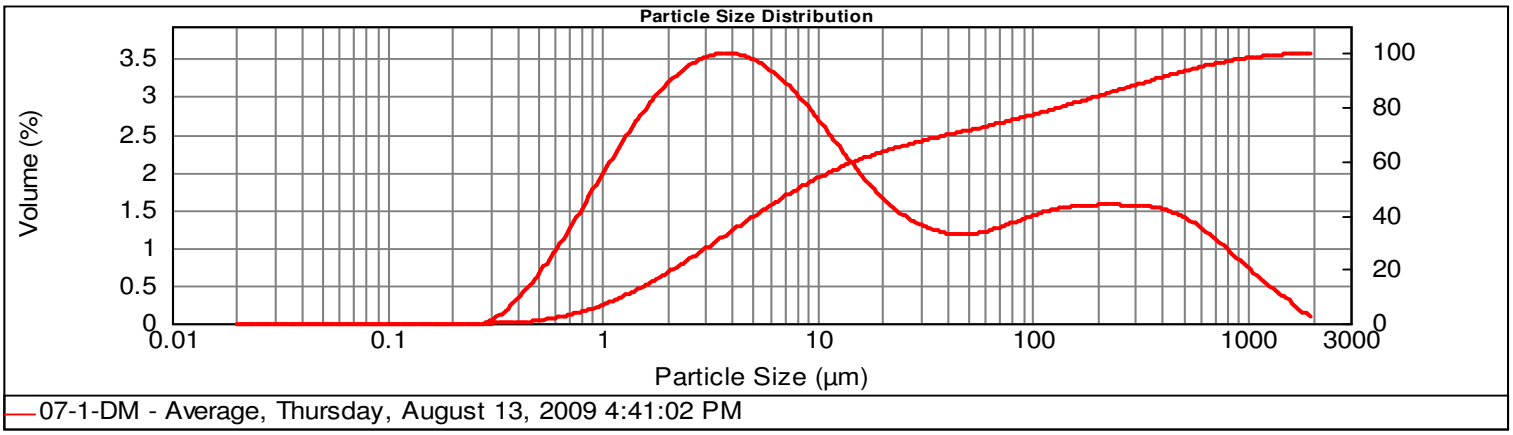
Inclusive SD (Sorting Coeff.) = 3.14 phi (Very Poorly Sorted)
Inclusive Kurtosis = .8 phi (Platykurtic)

Inclusive Skewness = .33 (Strongly Fine Skewed)
Inclusive Mean = 6.14 phi (Silt)

USGS
% Clay (0-2 um) = 18.57
% Fine Silt (2-3.9 um) = 15.03

d (0.1) : 1.257 **um**
d (0.5) : 8.218 **d (0.9) : 358.015**

Wentworth
% Clay (0-3.9 um) = 33.59
% Silt (3.91-31 um) = 34.02
% Coarse Silt (31 - 62.5 um) = 5.51
% Very Fine sand (62.5 - 125 um) = 6.19
% Fine sand (125-250 um) = 7.03
% Medium sand (250-500 um) = 6.91
% Coarse sand (500-1000 um) = 4.98
% Very Coarse sand (1000 - 2000 um) = 1.77



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.51	100
-0.5	(1414.21)	0.0	(1000.00)	1.26	99.49
0.0	(1000.00)	0.5	(707.10)	2.1	98.23
0.5	(707.10)	1.0	(500.00)	2.88	96.14
1.0	(500.00)	1.5	(353.55)	3.38	93.25
1.5	(353.55)	2.0	(250.00)	3.53	89.87
2.0	(250.00)	2.5	(176.78)	3.55	86.34
2.5	(176.78)	3.0	(125.00)	3.48	82.79
3.0	(125.00)	3.5	(88.39)	3.26	79.31
3.5	(88.39)	4.0	(62.50)	2.93	76.05
4.0	(62.50)	4.5	(44.19)	2.69	73.12
4.5	(44.19)	5.0	(31.25)	2.75	70.43
5.0	(31.25)	5.5	(22.10)	3.17	67.68
5.5	(22.10)	6.0	(15.63)	3.98	64.51
6.0	(15.63)	6.5	(11.05)	5.14	60.53
6.5	(11.05)	7.0	(7.81)	6.39	55.38
7.0	(7.81)	7.5	(5.52)	7.39	49
7.5	(5.52)	8.0	(3.90)	7.97	41.6
8.0	(3.90)	8.5	(2.76)	8.03	33.63
8.5	(2.76)	9.0	(1.95)	7.53	25.61
9.0	(1.95)	9.5	(1.38)	6.53	18.08
9.5	(1.38)	10.0	(0.98)	5.13	11.55
10.0	(0.98)	10.5	(0.69)	3.54	6.42
10.5	(0.69)	11.0	(0.49)	2.02	2.88
11.0	(0.49)	11.5	(0.35)	0.79	0.86
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:19:42 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.12

D[4,3] = 41.84um = 4.58phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.47um = 8.66phi

D[v,0.5] = 14.2um = 6.14phi
D[v,0.84] = 42.67um = 4.55phi
D[v,0.95] = 75.09um = 3.74phi

Kurtosis = 63.95
Skewness = 7.64
Standard Deviation = 151.15 um = 2.73phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

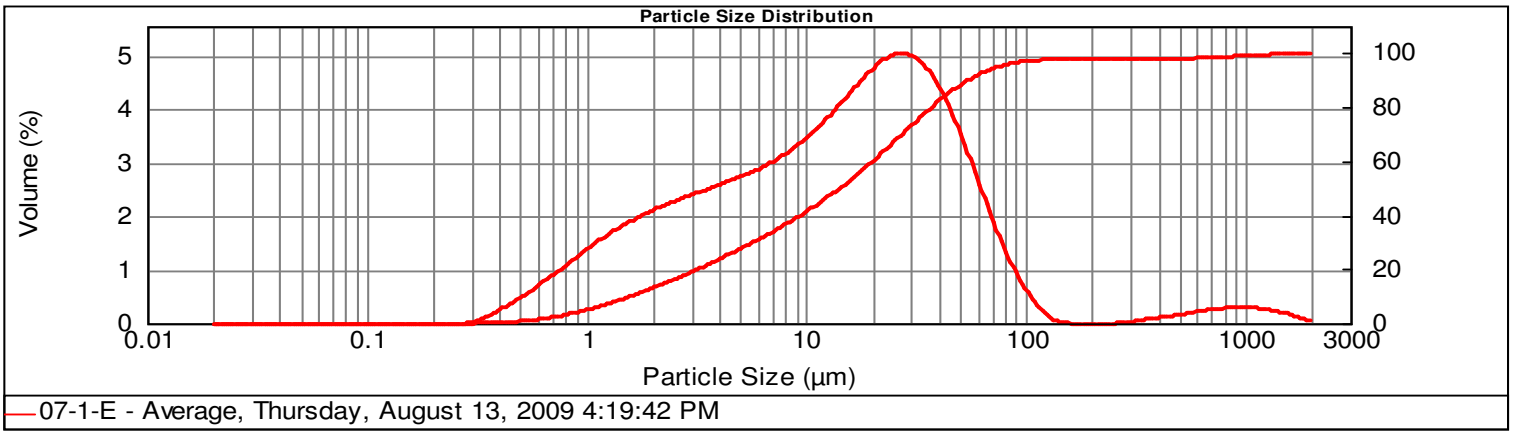
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 12.96
% Fine Silt (2-3.9 um) = 10.26

d (0.1) : 1.598 **um**
d (0.5) : 14.201 **d (0.9) : 54.589**

Wentworth
% Clay (0-3.9 um) = 23.22
% Silt (3.91-31 um) = 50.99
% Coarse Silt (31 - 62.5 um) = 18.31
% Very Fine sand (62.5 - 125 um) = 5.06

% Fine sand (125-250 um) = .07
% Medium sand (250-500 um) = .32
% Coarse sand (500-1000 um) = 1.13
% Very Coarse sand (1000 - 2000 um) = .91



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.3	100
-0.5	(1414.21)	0.0	(1000.00)	0.6	99.7
0.0	(1000.00)	0.5	(707.10)	0.65	99.09
0.5	(707.10)	1.0	(500.00)	0.48	98.44
1.0	(500.00)	1.5	(353.55)	0.27	97.97
1.5	(353.55)	2.0	(250.00)	0.06	97.7
2.0	(250.00)	2.5	(176.78)	0	97.64
2.5	(176.78)	3.0	(125.00)	0.07	97.64
3.0	(125.00)	3.5	(88.39)	1.17	97.57
3.5	(88.39)	4.0	(62.50)	3.89	96.4
4.0	(62.50)	4.5	(44.19)	7.56	92.51
4.5	(44.19)	5.0	(31.25)	10.49	84.96
5.0	(31.25)	5.5	(22.10)	11.38	74.47
5.5	(22.10)	6.0	(15.63)	10.47	63.09
6.0	(15.63)	6.5	(11.05)	8.94	52.62
6.5	(11.05)	7.0	(7.81)	7.63	43.68
7.0	(7.81)	7.5	(5.52)	6.72	36.05
7.5	(5.52)	8.0	(3.90)	6.09	29.34
8.0	(3.90)	8.5	(2.76)	5.57	23.25
8.5	(2.76)	9.0	(1.95)	5.04	17.67
9.0	(1.95)	9.5	(1.38)	4.39	12.64
9.5	(1.38)	10.0	(0.98)	3.55	8.24
10.0	(0.98)	10.5	(0.69)	2.53	4.69
10.5	(0.69)	11.0	(0.49)	1.49	2.16
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:24:49 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.59

D[4,3] = 29.57um = 5.08phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 14.58um = 6.1phi
D[v,0.84] = 41.52um = 4.59phi
D[v,0.95] = 67.6um = 3.89phi

Kurtosis = 130.58
Skewness = 10.57
Standard Deviation = 90.34 um = 3.47phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

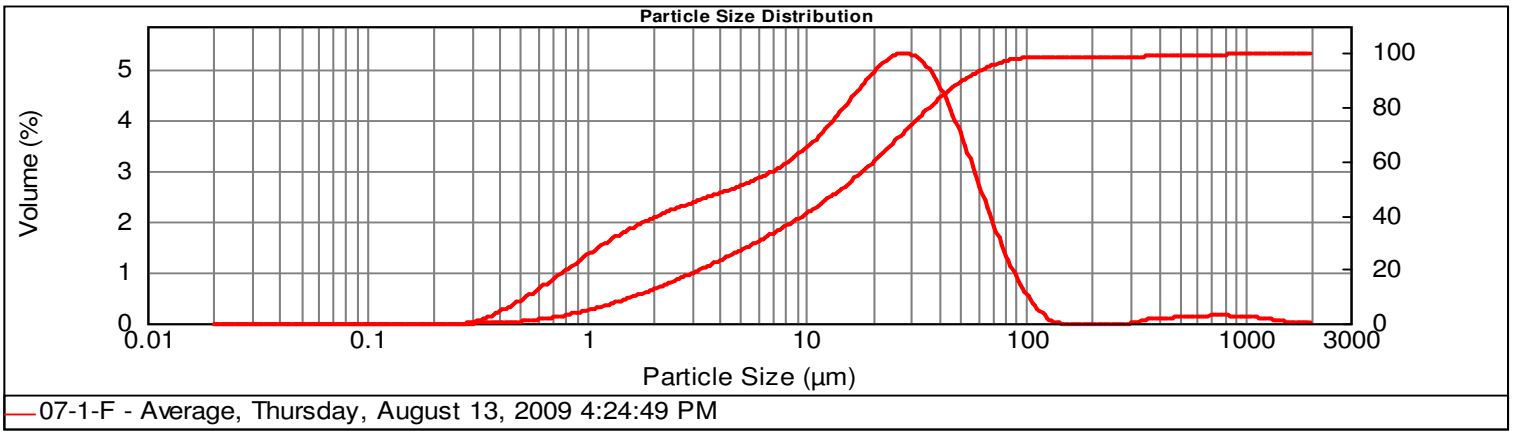
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.43 phi (Silt)

USGS
% Clay (0-2 um) = 12.51
% Fine Silt (2-3.9 um) = 10.13

d (0.1) : 1.650 **um**
d (0.5) : 14.575 **d (0.9) : 51.895**

Wentworth
% Clay (0-3.9 um) = 22.63
% Silt (3.91-31 um) = 51.8
% Coarse Silt (31 - 62.5 um) = 19.34
% Very Fine sand (62.5 - 125 um) = 5.04

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = .64
% Very Coarse sand (1000 - 2000 um) = .27



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.05	100
-0.5	(1414.21)	0.0	(1000.00)	0.22	99.95
0.0	(1000.00)	0.5	(707.10)	0.33	99.73
0.5	(707.10)	1.0	(500.00)	0.31	99.4
1.0	(500.00)	1.5	(353.55)	0.22	99.09
1.5	(353.55)	2.0	(250.00)	0.03	98.87
2.0	(250.00)	2.5	(176.78)	0	98.84
2.5	(176.78)	3.0	(125.00)	0.02	98.84
3.0	(125.00)	3.5	(88.39)	1.08	98.81
3.5	(88.39)	4.0	(62.50)	3.97	97.73
4.0	(62.50)	4.5	(44.19)	7.95	93.77
4.5	(44.19)	5.0	(31.25)	11.12	85.82
5.0	(31.25)	5.5	(22.10)	11.96	74.71
5.5	(22.10)	6.0	(15.63)	10.8	62.75
6.0	(15.63)	6.5	(11.05)	9.03	51.95
6.5	(11.05)	7.0	(7.81)	7.59	42.92
7.0	(7.81)	7.5	(5.52)	6.65	35.34
7.5	(5.52)	8.0	(3.90)	6.03	28.69

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.51	22.66
8.5	(2.76)	9.0	(1.95)	4.96	17.15
9.0	(1.95)	9.5	(1.38)	4.29	12.19
9.5	(1.38)	10.0	(0.98)	3.44	7.89
10.0	(0.98)	10.5	(0.69)	2.43	4.45
10.5	(0.69)	11.0	(0.49)	1.42	2.03
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:30:23 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.97

D[4,3] = 37.16um = 4.75phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.36um = 8.73phi

D[v,0.5] = 12.9um = 6.28phi
D[v,0.84] = 39.16um = 4.67phi
D[v,0.95] = 66.6um = 3.91phi

Kurtosis = 77.31
Skewness = 8.44
Standard Deviation = 143.64 um = 2.8phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

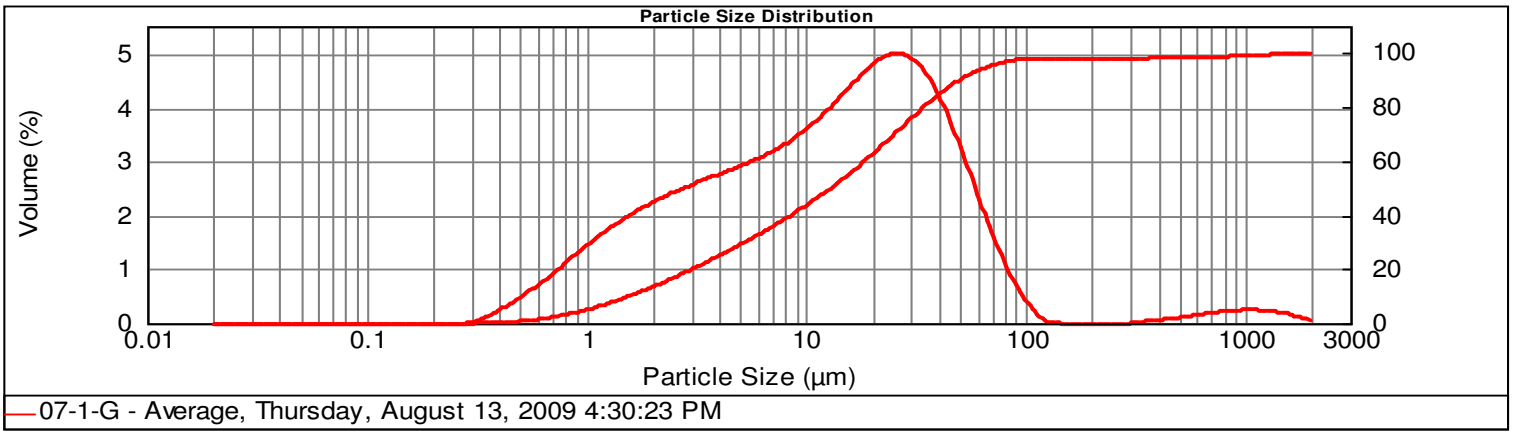
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.56 phi (Silt)

USGS
% Clay (0-2 um) = 13.5
% Fine Silt (2-3.9 um) = 10.97

d (0.1) : 1.555 **um**
d (0.5) : 12.900 **d (0.9) : 49.694**

Wentworth
% Clay (0-3.9 um) = 24.46
% Silt (3.91-31 um) = 52.43
% Coarse Silt (31 - 62.5 um) = 17.25
% Very Fine sand (62.5 - 125 um) = 3.99

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .17
% Coarse sand (500-1000 um) = .85
% Very Coarse sand (1000 - 2000 um) = .84



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.31	100
-0.5	(1414.21)	0.0	(1000.00)	0.54	99.69
0.0	(1000.00)	0.5	(707.10)	0.51	99.16
0.5	(707.10)	1.0	(500.00)	0.34	98.64
1.0	(500.00)	1.5	(353.55)	0.16	98.31
1.5	(353.55)	2.0	(250.00)	0.02	98.15
2.0	(250.00)	2.5	(176.78)	0	98.14
2.5	(176.78)	3.0	(125.00)	0	98.14
3.0	(125.00)	3.5	(88.39)	0.74	98.14
3.5	(88.39)	4.0	(62.50)	3.25	97.39
4.0	(62.50)	4.5	(44.19)	6.91	94.15
4.5	(44.19)	5.0	(31.25)	10.09	87.24
5.0	(31.25)	5.5	(22.10)	11.29	77.15
5.5	(22.10)	6.0	(15.63)	10.6	65.86
6.0	(15.63)	6.5	(11.05)	9.19	55.26
6.5	(11.05)	7.0	(7.81)	7.96	46.07
7.0	(7.81)	7.5	(5.52)	7.11	38.11
7.5	(5.52)	8.0	(3.90)	6.51	31

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.97	24.49
8.5	(2.76)	9.0	(1.95)	5.38	18.53
9.0	(1.95)	9.5	(1.38)	4.65	13.15
9.5	(1.38)	10.0	(0.98)	3.71	8.5
10.0	(0.98)	10.5	(0.69)	2.61	4.79
10.5	(0.69)	11.0	(0.49)	1.52	2.18
11.0	(0.49)	11.5	(0.35)	0.6	0.66
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 07-1-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 4:35:28 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.92

D[4,3] = 37.06um = 4.75phi
D[v,0.05] = 1.02um = 9.94phi
D[v,0.16] = 2.46um = 8.67phi

D[v,0.5] = 13.96um = 6.16phi
D[v,0.84] = 43.98um = 4.51phi
D[v,0.95] = 77.03um = 3.7phi

Kurtosis = 85.82
Skewness = 8.76
Standard Deviation = 129.54 um = 2.95phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

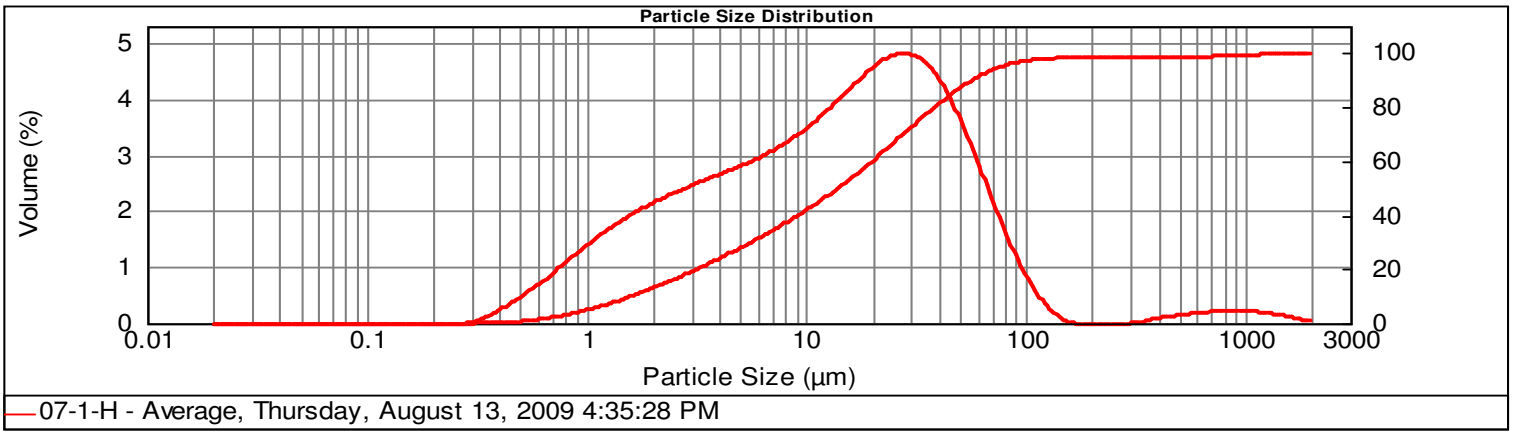
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 12.96
% Fine Silt (2-3.9 um) = 10.47

d (0.1) : 1.603 **um**
d (0.5) : 13.955 **d (0.9) : 56.555**

Wentworth
% Clay (0-3.9 um) = 23.43
% Silt (3.91-31 um) = 50.24
% Coarse Silt (31 - 62.5 um) = 18.25
% Very Fine sand (62.5 - 125 um) = 6.11

% Fine sand (125-250 um) = .2
% Medium sand (250-500 um) = .24
% Coarse sand (500-1000 um) = .89
% Very Coarse sand (1000 - 2000 um) = .64



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.43	99.79
0.0	(1000.00)	0.5	(707.10)	0.49	99.36
0.5	(707.10)	1.0	(500.00)	0.4	98.87
1.0	(500.00)	1.5	(353.55)	0.23	98.47
1.5	(353.55)	2.0	(250.00)	0.02	98.24
2.0	(250.00)	2.5	(176.78)	0	98.23
2.5	(176.78)	3.0	(125.00)	0.2	98.23
3.0	(125.00)	3.5	(88.39)	1.65	98.02
3.5	(88.39)	4.0	(62.50)	4.46	96.37
4.0	(62.50)	4.5	(44.19)	7.79	91.92
4.5	(44.19)	5.0	(31.25)	10.21	84.13
5.0	(31.25)	5.5	(22.10)	10.84	73.92
5.5	(22.10)	6.0	(15.63)	10.06	63.07
6.0	(15.63)	6.5	(11.05)	8.81	53.01
6.5	(11.05)	7.0	(7.81)	7.68	44.2
7.0	(7.81)	7.5	(5.52)	6.84	36.52
7.5	(5.52)	8.0	(3.90)	6.22	29.68
8.0	(3.90)	8.5	(2.76)	5.7	23.46
8.5	(2.76)	9.0	(1.95)	5.13	17.76
9.0	(1.95)	9.5	(1.38)	4.45	12.63
9.5	(1.38)	10.0	(0.98)	3.56	8.18
10.0	(0.98)	10.5	(0.69)	2.51	4.62
10.5	(0.69)	11.0	(0.49)	1.47	2.11
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 08-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 3:35:21 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.27

D[4,3] = 35.33um = 4.82phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.34um = 8.74phi

D[v,0.5] = 12.37um = 6.34phi
D[v,0.84] = 38.04um = 4.72phi
D[v,0.95] = 65.65um = 3.93phi

Kurtosis = 81.01
Skewness = 8.55
Standard Deviation = 133.32 um = 2.91phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

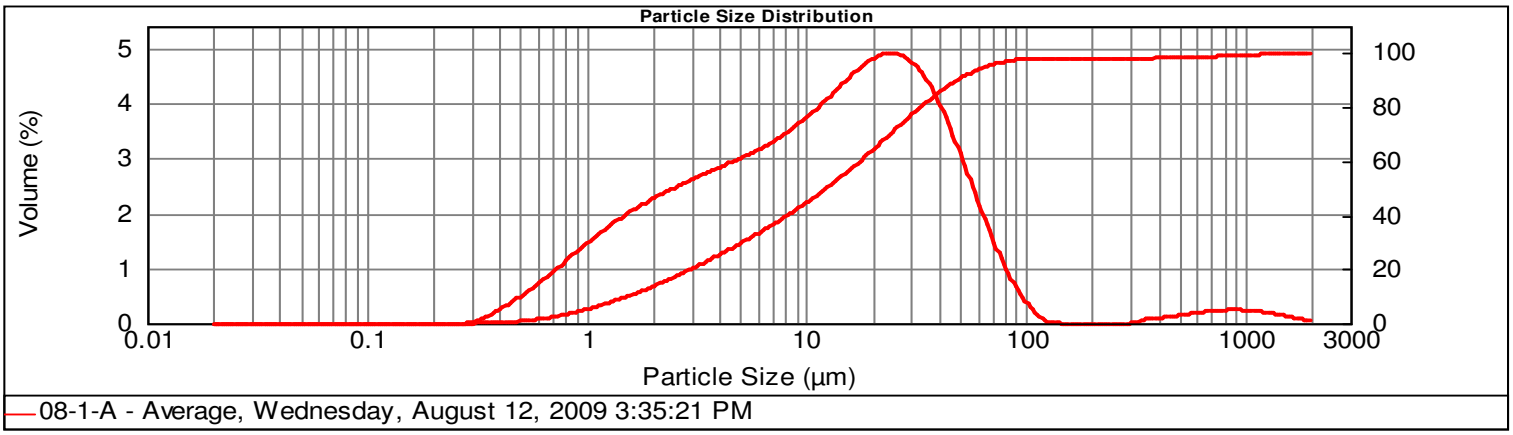
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.6 phi (Silt)

USGS
% Clay (0-2 um) = 13.63
% Fine Silt (2-3.9 um) = 11.14

d (0.1) : 1.543 **um**
d (0.5) : 12.372 **d (0.9) : 48.575**

Wentworth
% Clay (0-3.9 um) = 24.76
% Silt (3.91-31 um) = 53.22
% Coarse Silt (31 - 62.5 um) = 16.39
% Very Fine sand (62.5 - 125 um) = 3.71

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .27
% Coarse sand (500-1000 um) = .96
% Very Coarse sand (1000 - 2000 um) = .68



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.22	100
-0.5	(1414.21)	0.0	(1000.00)	0.46	99.78
0.0	(1000.00)	0.5	(707.10)	0.54	99.32
0.5	(707.10)	1.0	(500.00)	0.42	98.78
1.0	(500.00)	1.5	(353.55)	0.24	98.36
1.5	(353.55)	2.0	(250.00)	0.03	98.12
2.0	(250.00)	2.5	(176.78)	0	98.09
2.5	(176.78)	3.0	(125.00)	0	98.09
3.0	(125.00)	3.5	(88.39)	0.69	98.09
3.5	(88.39)	4.0	(62.50)	3.03	97.4
4.0	(62.50)	4.5	(44.19)	6.51	94.37
4.5	(44.19)	5.0	(31.25)	9.64	87.87
5.0	(31.25)	5.5	(22.10)	11.04	78.23
5.5	(22.10)	6.0	(15.63)	10.67	67.19
6.0	(15.63)	6.5	(11.05)	9.46	56.52
6.5	(11.05)	7.0	(7.81)	8.25	47.06
7.0	(7.81)	7.5	(5.52)	7.34	38.8
7.5	(5.52)	8.0	(3.90)	6.67	31.47
8.0	(3.90)	8.5	(2.76)	6.08	24.79
8.5	(2.76)	9.0	(1.95)	5.44	18.71
9.0	(1.95)	9.5	(1.38)	4.68	13.28
9.5	(1.38)	10.0	(0.98)	3.74	8.59
10.0	(0.98)	10.5	(0.69)	2.64	4.85
10.5	(0.69)	11.0	(0.49)	1.54	2.21
11.0	(0.49)	11.5	(0.35)	0.62	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 08-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 3:39:50 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.75

D[4,3] = 42.59um = 4.55phi
D[v,0.05] = .99um = 9.97phi
D[v,0.16] = 2.4um = 8.7phi

D[v,0.5] = 13.51um = 6.21phi
D[v,0.84] = 45.57um = 4.46phi
D[v,0.95] = 84.41um = 3.57phi

Kurtosis = 62.96
Skewness = 7.53
Standard Deviation = 148.74 um = 2.75phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

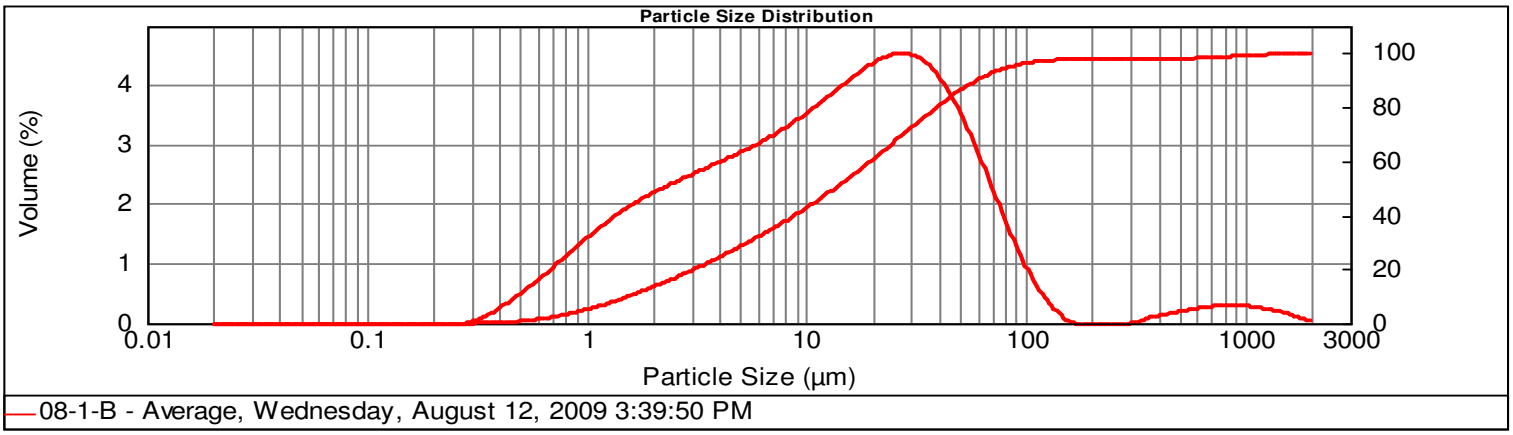
Inclusive Skewness = -0.17 (Coarse Skewed)
Inclusive Mean = 6.46 phi (Silt)

USGS
% Clay (0-2 um) = 13.34
% Fine Silt (2-3.9 um) = 10.6

d (0.1) : 1.561 **um**
d (0.5) : 13.513 **d (0.9) : 59.767**

Wentworth
% Clay (0-3.9 um) = 23.95
% Silt (3.91-31 um) = 49.43
% Coarse Silt (31 - 62.5 um) = 17.45
% Very Fine sand (62.5 - 125 um) = 6.48

% Fine sand (125-250 um) = .27
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = 1.23
% Very Coarse sand (1000 - 2000 um) = .84



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.27	100
-0.5	(1414.21)	0.0	(1000.00)	0.57	99.73
0.0	(1000.00)	0.5	(707.10)	0.67	99.16
0.5	(707.10)	1.0	(500.00)	0.56	98.48
1.0	(500.00)	1.5	(353.55)	0.32	97.92
1.5	(353.55)	2.0	(250.00)	0.03	97.6
2.0	(250.00)	2.5	(176.78)	0	97.57
2.5	(176.78)	3.0	(125.00)	0.27	97.57
3.0	(125.00)	3.5	(88.39)	1.86	97.3
3.5	(88.39)	4.0	(62.50)	4.62	95.44
4.0	(62.50)	4.5	(44.19)	7.59	90.82
4.5	(44.19)	5.0	(31.25)	9.62	83.23
5.0	(31.25)	5.5	(22.10)	10.18	73.61
5.5	(22.10)	6.0	(15.63)	9.66	63.43
6.0	(15.63)	6.5	(11.05)	8.71	53.77
6.5	(11.05)	7.0	(7.81)	7.77	45.06
7.0	(7.81)	7.5	(5.52)	6.98	37.29
7.5	(5.52)	8.0	(3.90)	6.34	30.32
8.0	(3.90)	8.5	(2.76)	5.77	23.97
8.5	(2.76)	9.0	(1.95)	5.19	18.2
9.0	(1.95)	9.5	(1.38)	4.52	13.01
9.5	(1.38)	10.0	(0.98)	3.65	8.49
10.0	(0.98)	10.5	(0.69)	2.61	4.83
10.5	(0.69)	11.0	(0.49)	1.54	2.23
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 08-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 3:44:30 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.45

D[4,3] = 44.25um = 4.5phi
D[v,0.05] = .98um = 9.99phi
D[v,0.16] = 2.33um = 8.74phi

D[v,0.5] = 12.69um = 6.3phi
D[v,0.84] = 42.63um = 4.55phi
D[v,0.95] = 81.08um = 3.62phi

Kurtosis = 55.6
Skewness = 7.14
Standard Deviation = 161.44 um = 2.63phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

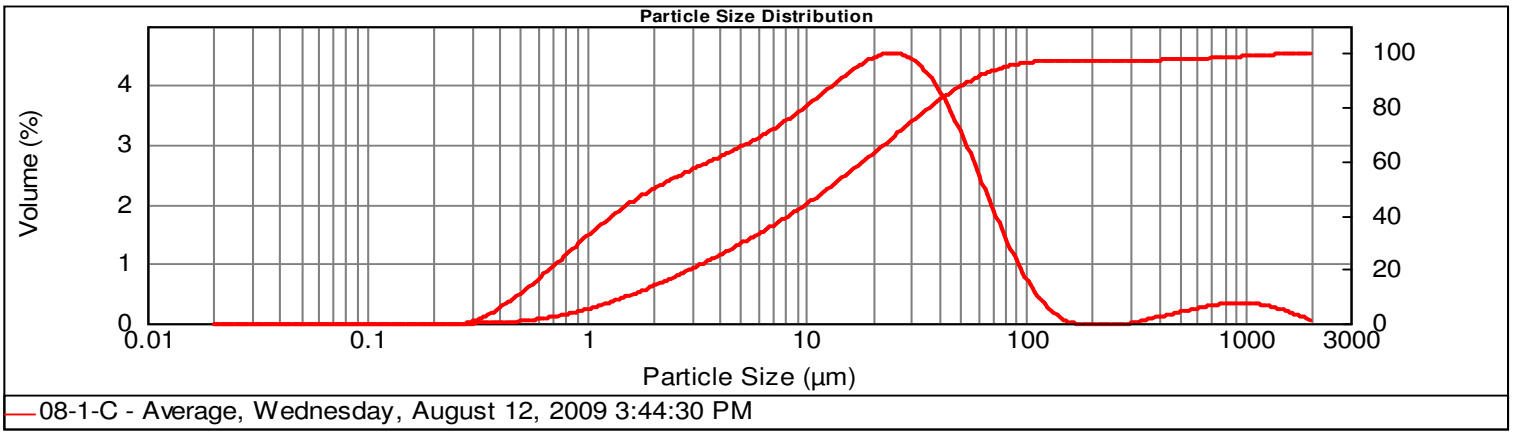
Inclusive Skewness = -0.16 (Coarse Skewed)
Inclusive Mean = 6.53 phi (Silt)

USGS
% Clay (0-2 um) = 13.69
% Fine Silt (2-3.9 um) = 10.97

d (0.1) : 1.533 **um**
d (0.5) : 12.688 **d (0.9) : 56.308**

Wentworth
% Clay (0-3.9 um) = 24.65
% Silt (3.91-31 um) = 50.76
% Coarse Silt (31 - 62.5 um) = 16.36
% Very Fine sand (62.5 - 125 um) = 5.4

% Fine sand (125-250 um) = .18
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = 1.3
% Very Coarse sand (1000 - 2000 um) = 1.04



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.35	100
-0.5	(1414.21)	0.0	(1000.00)	0.69	99.65
0.0	(1000.00)	0.5	(707.10)	0.75	98.96
0.5	(707.10)	1.0	(500.00)	0.55	98.21
1.0	(500.00)	1.5	(353.55)	0.28	97.66
1.5	(353.55)	2.0	(250.00)	0.03	97.38
2.0	(250.00)	2.5	(176.78)	0	97.36
2.5	(176.78)	3.0	(125.00)	0.18	97.36
3.0	(125.00)	3.5	(88.39)	1.46	97.18
3.5	(88.39)	4.0	(62.50)	3.94	95.71
4.0	(62.50)	4.5	(44.19)	6.9	91.77
4.5	(44.19)	5.0	(31.25)	9.23	84.87
5.0	(31.25)	5.5	(22.10)	10.19	75.64
5.5	(22.10)	6.0	(15.63)	9.91	65.45
6.0	(15.63)	6.5	(11.05)	9.02	55.54
6.5	(11.05)	7.0	(7.81)	8.05	46.52
7.0	(7.81)	7.5	(5.52)	7.22	38.47
7.5	(5.52)	8.0	(3.90)	6.56	31.25

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.98	24.68
8.5	(2.76)	9.0	(1.95)	5.37	18.7
9.0	(1.95)	9.5	(1.38)	4.66	13.34
9.5	(1.38)	10.0	(0.98)	3.75	8.68
10.0	(0.98)	10.5	(0.69)	2.67	4.93
10.5	(0.69)	11.0	(0.49)	1.57	2.27
11.0	(0.49)	11.5	(0.35)	0.64	0.7
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 08-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 3:51:26 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.83

D[4,3] = 41.41um = 4.59phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.35um = 8.73phi

D[v,0.5] = 12.85um = 6.28phi
D[v,0.84] = 42.92um = 4.54phi
D[v,0.95] = 79.75um = 3.65phi

Kurtosis = 64.3
Skewness = 7.65
Standard Deviation = 150.18 um = 2.74phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

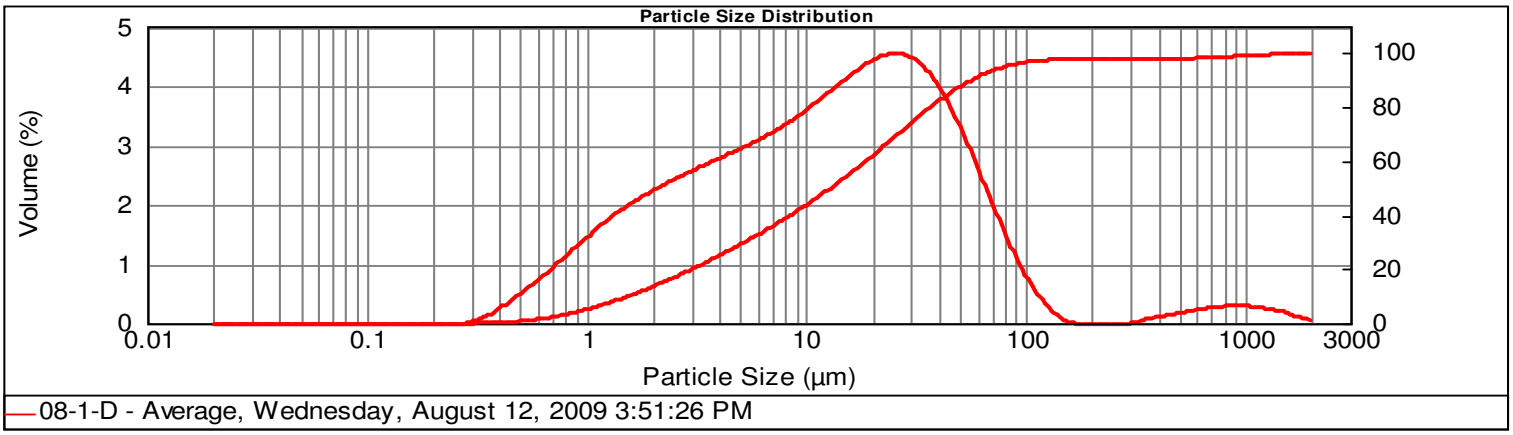
Inclusive Skewness = -0.17 (Coarse Skewed)
Inclusive Mean = 6.52 phi (Silt)

USGS
% Clay (0-2 um) = 13.58
% Fine Silt (2-3.9 um) = 10.95

d (0.1) : 1.544 **um**
d (0.5) : 12.854 **d (0.9) : 56.350**

Wentworth
% Clay (0-3.9 um) = 24.53
% Silt (3.91-31 um) = 50.55
% Coarse Silt (31 - 62.5 um) = 16.74
% Very Fine sand (62.5 - 125 um) = 5.65

% Fine sand (125-250 um) = .2
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = 1.15
% Very Coarse sand (1000 - 2000 um) = .88



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.3	100
-0.5	(1414.21)	0.0	(1000.00)	0.59	99.7
0.0	(1000.00)	0.5	(707.10)	0.65	99.12
0.5	(707.10)	1.0	(500.00)	0.5	98.47
1.0	(500.00)	1.5	(353.55)	0.27	97.96
1.5	(353.55)	2.0	(250.00)	0.03	97.69
2.0	(250.00)	2.5	(176.78)	0	97.66
2.5	(176.78)	3.0	(125.00)	0.2	97.66
3.0	(125.00)	3.5	(88.39)	1.56	97.46
3.5	(88.39)	4.0	(62.50)	4.09	95.91
4.0	(62.50)	4.5	(44.19)	7.09	91.81
4.5	(44.19)	5.0	(31.25)	9.41	84.72
5.0	(31.25)	5.5	(22.10)	10.28	75.31
5.5	(22.10)	6.0	(15.63)	9.88	65.04
6.0	(15.63)	6.5	(11.05)	8.93	55.16
6.5	(11.05)	7.0	(7.81)	7.96	46.23
7.0	(7.81)	7.5	(5.52)	7.17	38.27
7.5	(5.52)	8.0	(3.90)	6.54	31.1

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.97	24.56
8.5	(2.76)	9.0	(1.95)	5.36	18.59
9.0	(1.95)	9.5	(1.38)	4.64	13.23
9.5	(1.38)	10.0	(0.98)	3.73	8.59
10.0	(0.98)	10.5	(0.69)	2.64	4.87
10.5	(0.69)	11.0	(0.49)	1.55	2.23
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 08-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured:
Wednesday, August 12, 2009
3:56:53 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.60

D[4,3] = 40.45um = 4.63phi
D[v,0.05] = 1um = 9.96phi
D[v,0.16] = 2.39um = 8.71phi

D[v,0.5] = 13.32um = 6.23phi
D[v,0.84] = 44.39um = 4.49phi
D[v,0.95] = 81.32um = 3.62phi

Kurtosis = 69.32
Skewness = 7.9
Standard Deviation = 142.84 um = 2.81phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

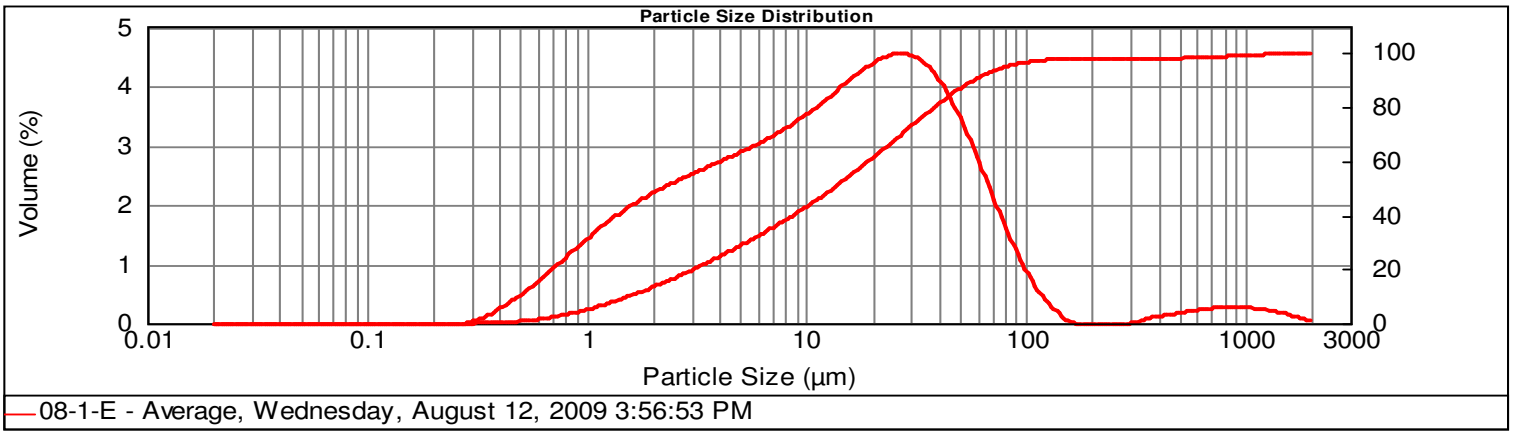
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.48 phi (Silt)

USGS
% Clay (0-2 um) = 13.32
% Fine Silt (2-3.9 um) = 10.76

d (0.1) : 1.568 **um**
d (0.5) : 13.318 **d (0.9) : 58.011**

Wentworth
% Clay (0-3.9 um) = 24.08
% Silt (3.91-31 um) = 49.92
% Coarse Silt (31 - 62.5 um) = 17.36
% Very Fine sand (62.5 - 125 um) = 6.17

% Fine sand (125-250 um) = .26
% Medium sand (250-500 um) = .31
% Coarse sand (500-1000 um) = 1.11
% Very Coarse sand (1000 - 2000 um) = .78



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.26	100
-0.5	(1414.21)	0.0	(1000.00)	0.53	99.74
0.0	(1000.00)	0.5	(707.10)	0.61	99.22
0.5	(707.10)	1.0	(500.00)	0.5	98.61
1.0	(500.00)	1.5	(353.55)	0.28	98.11
1.5	(353.55)	2.0	(250.00)	0.03	97.83
2.0	(250.00)	2.5	(176.78)	0	97.8
2.5	(176.78)	3.0	(125.00)	0.26	97.8
3.0	(125.00)	3.5	(88.39)	1.75	97.53
3.5	(88.39)	4.0	(62.50)	4.42	95.78
4.0	(62.50)	4.5	(44.19)	7.47	91.36
4.5	(44.19)	5.0	(31.25)	9.65	83.89
5.0	(31.25)	5.5	(22.10)	10.3	74.24
5.5	(22.10)	6.0	(15.63)	9.76	63.93
6.0	(15.63)	6.5	(11.05)	8.77	54.17
6.5	(11.05)	7.0	(7.81)	7.82	45.4
7.0	(7.81)	7.5	(5.52)	7.05	37.58
7.5	(5.52)	8.0	(3.90)	6.42	30.54

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.86	24.11
8.5	(2.76)	9.0	(1.95)	5.27	18.25
9.0	(1.95)	9.5	(1.38)	4.56	12.99
9.5	(1.38)	10.0	(0.98)	3.66	8.42
10.0	(0.98)	10.5	(0.69)	2.59	4.77
10.5	(0.69)	11.0	(0.49)	1.51	2.18
11.0	(0.49)	11.5	(0.35)	0.61	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 08-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 4:02:05 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.04

D[4,3] = 40.09um = 4.64phi
D[v,0.05] = 1um = 9.96phi
D[v,0.16] = 2.41um = 8.7phi

D[v,0.5] = 13.35um = 6.23phi
D[v,0.84] = 42.62um = 4.55phi
D[v,0.95] = 76.83um = 3.7phi

Kurtosis = 69.03
Skewness = 7.91
Standard Deviation = 144.88 um = 2.79phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

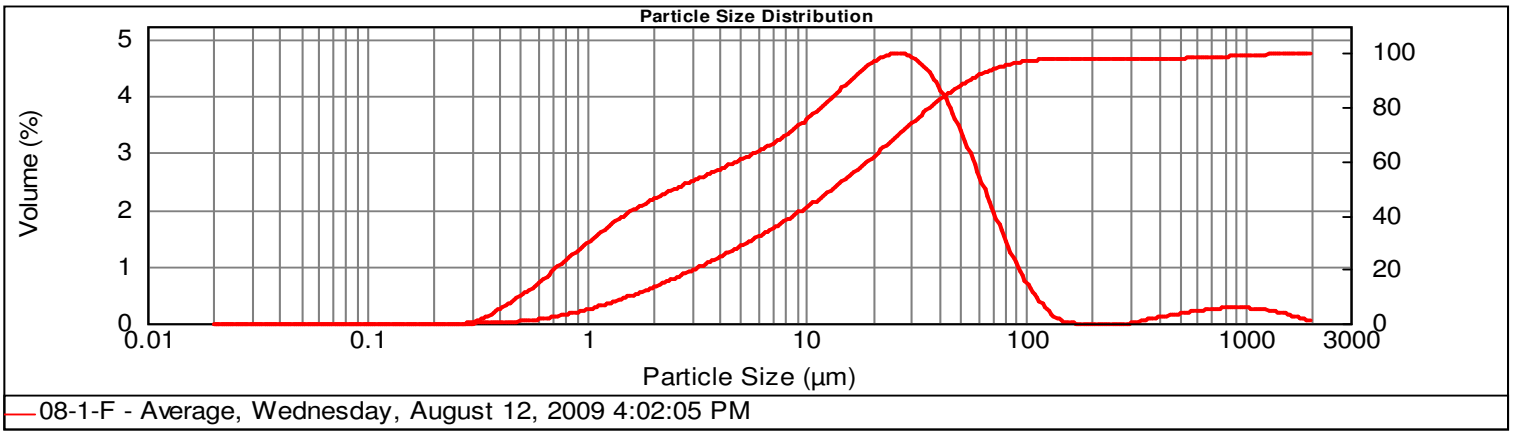
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 13.25
% Fine Silt (2-3.9 um) = 10.64

d (0.1) : 1.574 **um**
d (0.5) : 13.355 **d (0.9) : 55.278**

Wentworth
% Clay (0-3.9 um) = 23.89
% Silt (3.91-31 um) = 50.98
% Coarse Silt (31 - 62.5 um) = 17.34
% Very Fine sand (62.5 - 125 um) = 5.46

% Fine sand (125-250 um) = .13
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = 1.09
% Very Coarse sand (1000 - 2000 um) = .82



Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
-1	(2000.00)	-0.5	(1414.21)	0.27	100
-0.5	(1414.21)	0.0	(1000.00)	0.54	99.73
0.0	(1000.00)	0.5	(707.10)	0.61	99.18
0.5	(707.10)	1.0	(500.00)	0.48	98.57
1.0	(500.00)	1.5	(353.55)	0.26	98.1
1.5	(353.55)	2.0	(250.00)	0.03	97.83
2.0	(250.00)	2.5	(176.78)	0	97.81
2.5	(176.78)	3.0	(125.00)	0.13	97.81
3.0	(125.00)	3.5	(88.39)	1.42	97.68
3.5	(88.39)	4.0	(62.50)	4.04	96.26
4.0	(62.50)	4.5	(44.19)	7.28	92.22
4.5	(44.19)	5.0	(31.25)	9.82	84.94
5.0	(31.25)	5.5	(22.10)	10.72	75.12
5.5	(22.10)	6.0	(15.63)	10.17	64.4
6.0	(15.63)	6.5	(11.05)	9.01	54.23
6.5	(11.05)	7.0	(7.81)	7.89	45.22
7.0	(7.81)	7.5	(5.52)	7.03	37.33
7.5	(5.52)	8.0	(3.90)	6.38	30.3

Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
8.0	(3.90)	8.5	(2.76)	5.8	23.92
8.5	(2.76)	9.0	(1.95)	5.21	18.12
9.0	(1.95)	9.5	(1.38)	4.52	12.91
9.5	(1.38)	10.0	(0.98)	3.64	8.39
10.0	(0.98)	10.5	(0.69)	2.58	4.75
10.5	(0.69)	11.0	(0.49)	1.51	2.17
11.0	(0.49)	11.5	(0.35)	0.6	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 09-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:01:10 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.35

D[4,3] = 39.56um = 4.66phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.39um = 8.71phi

D[v,0.5] = 13.03um = 6.26phi
D[v,0.84] = 39.02um = 4.68phi
D[v,0.95] = 68.83um = 3.86phi

Kurtosis = 66.58
Skewness = 7.82
Standard Deviation = 149.7 um = 2.74phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

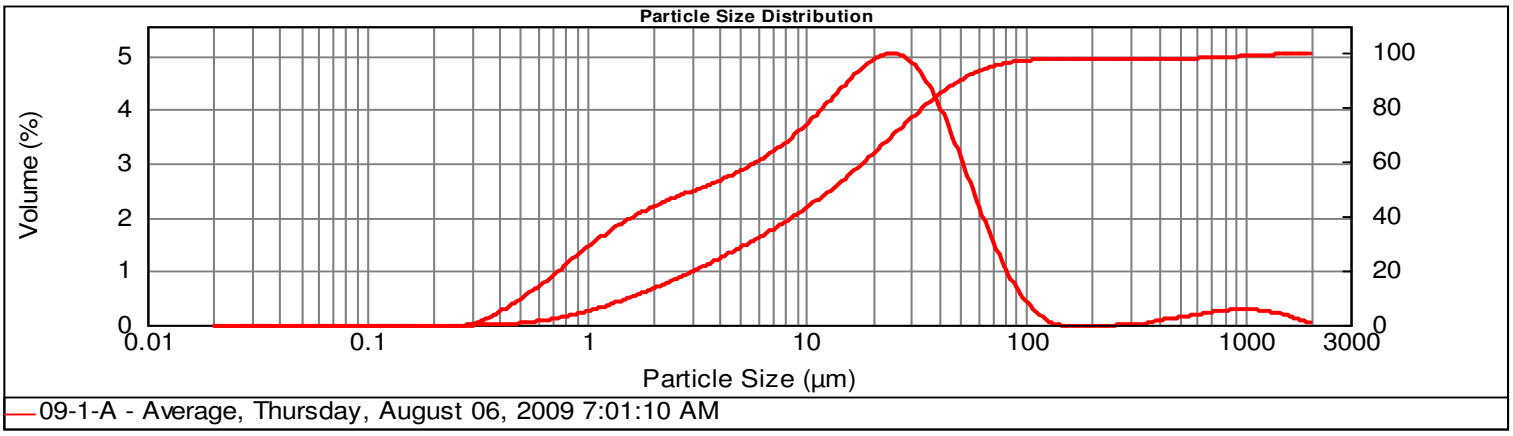
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.55 phi (Silt)

USGS
% Clay (0-2 um) = 13.38
% Fine Silt (2-3.9 um) = 10.61

d (0.1) : 1.561 **um**
d (0.5) : 13.027 **d (0.9) : 49.999**

Wentworth
% Clay (0-3.9 um) = 23.99
% Silt (3.91-31 um) = 53.15
% Coarse Silt (31 - 62.5 um) = 16.68
% Very Fine sand (62.5 - 125 um) = 3.94

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = 1.06
% Very Coarse sand (1000 - 2000 um) = .9



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.3	100
-0.5	(1414.21)	0.0	(1000.00)	0.6	99.7
0.0	(1000.00)	0.5	(707.10)	0.62	99.1
0.5	(707.10)	1.0	(500.00)	0.44	98.47
1.0	(500.00)	1.5	(353.55)	0.22	98.04
1.5	(353.55)	2.0	(250.00)	0.04	97.82
2.0	(250.00)	2.5	(176.78)	0	97.78
2.5	(176.78)	3.0	(125.00)	0.02	97.78
3.0	(125.00)	3.5	(88.39)	0.83	97.76
3.5	(88.39)	4.0	(62.50)	3.1	96.92
4.0	(62.50)	4.5	(44.19)	6.59	93.82
4.5	(44.19)	5.0	(31.25)	9.83	87.23
5.0	(31.25)	5.5	(22.10)	11.31	77.4
5.5	(22.10)	6.0	(15.63)	10.89	66.09
6.0	(15.63)	6.5	(11.05)	9.55	55.19
6.5	(11.05)	7.0	(7.81)	8.17	45.65
7.0	(7.81)	7.5	(5.52)	7.11	37.47
7.5	(5.52)	8.0	(3.90)	6.34	30.36

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.76	24.02
8.5	(2.76)	9.0	(1.95)	5.22	18.26
9.0	(1.95)	9.5	(1.38)	4.57	13.04
9.5	(1.38)	10.0	(0.98)	3.68	8.47
10.0	(0.98)	10.5	(0.69)	2.61	4.79
10.5	(0.69)	11.0	(0.49)	1.52	2.18
11.0	(0.49)	11.5	(0.35)	0.61	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 9-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:07:18 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.80

D[4,3] = 43.65um = 4.52phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.53um = 8.63phi

D[v,0.5] = 14.14um = 6.14phi
D[v,0.84] = 40.58um = 4.62phi
D[v,0.95] = 70.06um = 3.84phi

Kurtosis = 55.22
Skewness = 7.24
Standard Deviation = 166.53 um = 2.59phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

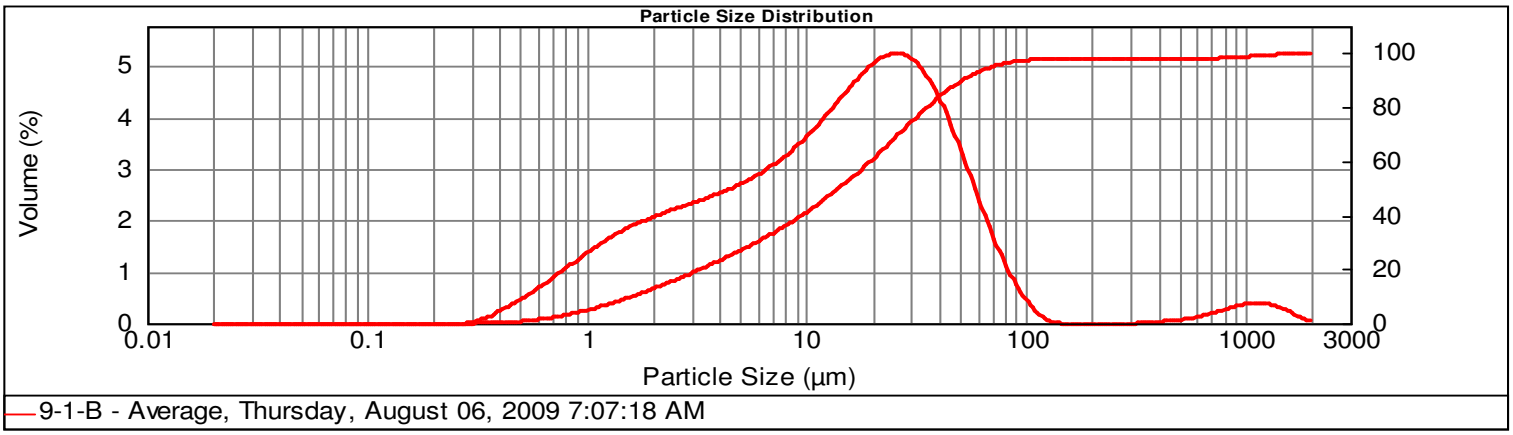
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 12.71
% Fine Silt (2-3.9 um) = 9.98

d (0.1) : 1.623 **um**
d (0.5) : 14.141 **d (0.9) : 51.537**

Wentworth
% Clay (0-3.9 um) = 22.7
% Silt (3.91-31 um) = 52.87
% Coarse Silt (31 - 62.5 um) = 17.94
% Very Fine sand (62.5 - 125 um) = 4.23

% Fine sand (125-250 um) = .01
% Medium sand (250-500 um) = .07
% Coarse sand (500-1000 um) = .93
% Very Coarse sand (1000 - 2000 um) = 1.26



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.4	100
-0.5	(1414.21)	0.0	(1000.00)	0.86	99.6
0.0	(1000.00)	0.5	(707.10)	0.66	98.74
0.5	(707.10)	1.0	(500.00)	0.27	98.08
1.0	(500.00)	1.5	(353.55)	0.07	97.81
1.5	(353.55)	2.0	(250.00)	0	97.74
2.0	(250.00)	2.5	(176.78)	0	97.74
2.5	(176.78)	3.0	(125.00)	0.01	97.74
3.0	(125.00)	3.5	(88.39)	0.83	97.73
3.5	(88.39)	4.0	(62.50)	3.39	96.89
4.0	(62.50)	4.5	(44.19)	7.16	93.5
4.5	(44.19)	5.0	(31.25)	10.5	86.34
5.0	(31.25)	5.5	(22.10)	11.82	75.83
5.5	(22.10)	6.0	(15.63)	11.1	64.01
6.0	(15.63)	6.5	(11.05)	9.48	52.91
6.5	(11.05)	7.0	(7.81)	7.92	43.43
7.0	(7.81)	7.5	(5.52)	6.79	35.51
7.5	(5.52)	8.0	(3.90)	6	28.72

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.42	22.72
8.5	(2.76)	9.0	(1.95)	4.91	17.31
9.0	(1.95)	9.5	(1.38)	4.32	12.39
9.5	(1.38)	10.0	(0.98)	3.5	8.07
10.0	(0.98)	10.5	(0.69)	2.49	4.57
10.5	(0.69)	11.0	(0.49)	1.45	2.09
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 9-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:11:51 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.31

D[4,3] = 41.26um = 4.6phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.53um = 8.63phi

D[v,0.5] = 13.92um = 6.17phi
D[v,0.84] = 40.64um = 4.62phi
D[v,0.95] = 71.33um = 3.81phi

Kurtosis = 64.72
Skewness = 7.73
Standard Deviation = 154.1 um = 2.7phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

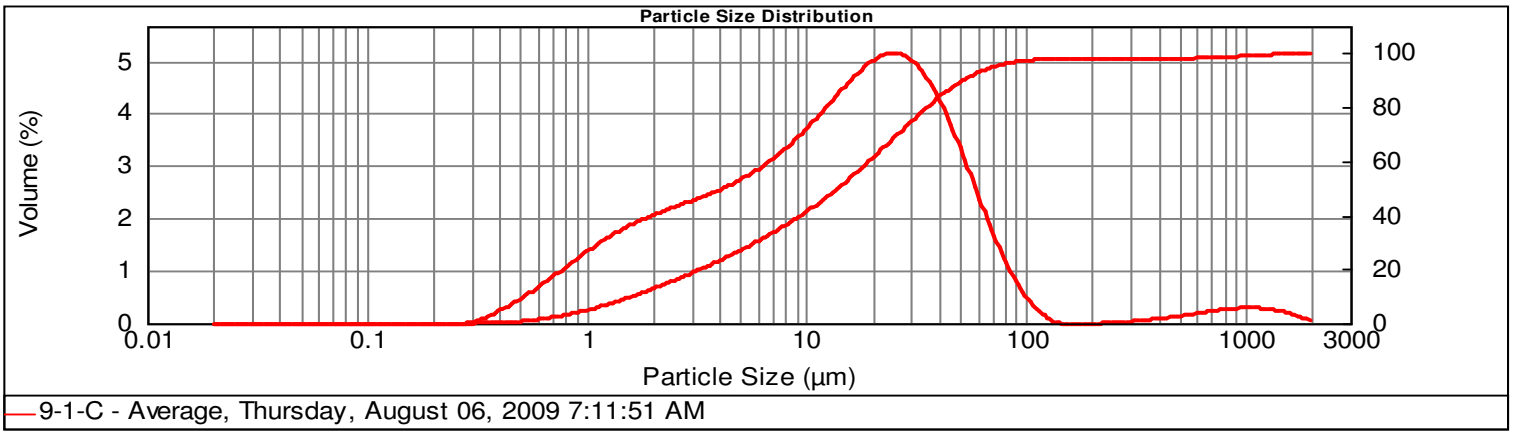
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 12.7
% Fine Silt (2-3.9 um) = 9.98

d (0.1) : 1.623 **um**
d (0.5) : 13.924 **d (0.9) : 51.960**

Wentworth
% Clay (0-3.9 um) = 22.68
% Silt (3.91-31 um) = 53.07
% Coarse Silt (31 - 62.5 um) = 17.54
% Very Fine sand (62.5 - 125 um) = 4.38

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = 1.02
% Very Coarse sand (1000 - 2000 um) = .97



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.34	100
-0.5	(1414.21)	0.0	(1000.00)	0.63	99.66
0.0	(1000.00)	0.5	(707.10)	0.61	99.03
0.5	(707.10)	1.0	(500.00)	0.41	98.42
1.0	(500.00)	1.5	(353.55)	0.22	98.01
1.5	(353.55)	2.0	(250.00)	0.08	97.79
2.0	(250.00)	2.5	(176.78)	0.01	97.71
2.5	(176.78)	3.0	(125.00)	0.02	97.7
3.0	(125.00)	3.5	(88.39)	0.94	97.68
3.5	(88.39)	4.0	(62.50)	3.44	96.74
4.0	(62.50)	4.5	(44.19)	7.06	93.3
4.5	(44.19)	5.0	(31.25)	10.23	86.24
5.0	(31.25)	5.5	(22.10)	11.57	76.01
5.5	(22.10)	6.0	(15.63)	11.06	64.44
6.0	(15.63)	6.5	(11.05)	9.62	53.38
6.5	(11.05)	7.0	(7.81)	8.1	43.76
7.0	(7.81)	7.5	(5.52)	6.9	35.66
7.5	(5.52)	8.0	(3.90)	6.05	28.75

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.42	22.71
8.5	(2.76)	9.0	(1.95)	4.9	17.28
9.0	(1.95)	9.5	(1.38)	4.3	12.38
9.5	(1.38)	10.0	(0.98)	3.49	8.08
10.0	(0.98)	10.5	(0.69)	2.49	4.59
10.5	(0.69)	11.0	(0.49)	1.46	2.1
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 09-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:16:13 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.29

D[4,3] = 43.61um = 4.52phi
D[v,0.05] = .98um = 10phi
D[v,0.16] = 2.34um = 8.74phi

D[v,0.5] = 13.5um = 6.21phi
D[v,0.84] = 41.4um = 4.59phi
D[v,0.95] = 74.06um = 3.76phi

Kurtosis = 57.29
Skewness = 7.29
Standard Deviation = 162.7 um = 2.62phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

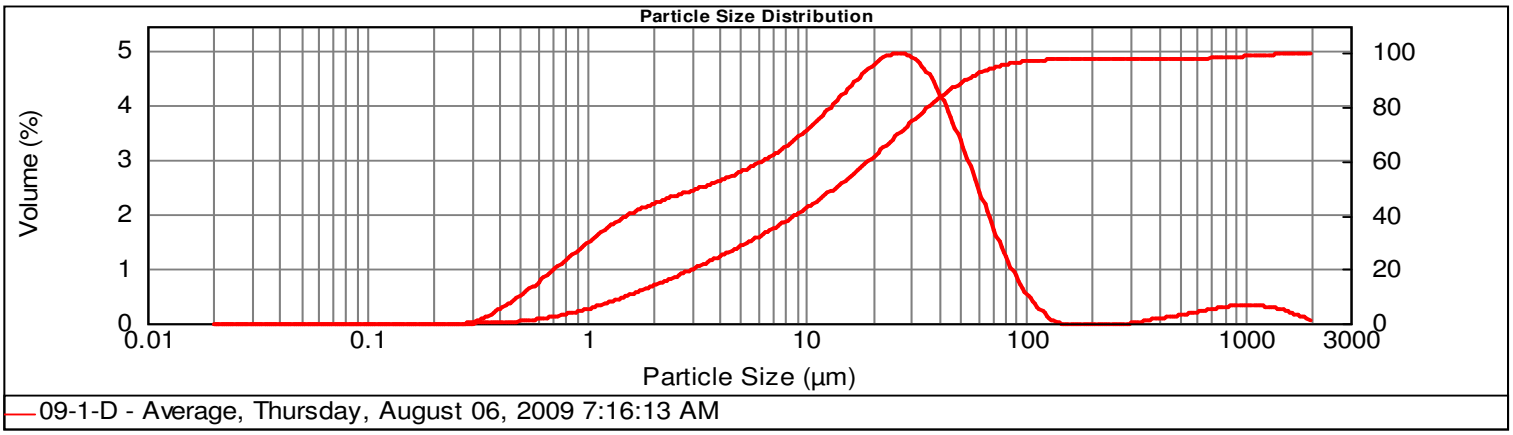
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.68
% Fine Silt (2-3.9 um) = 10.45

d (0.1) : 1.527 **um**
d (0.5) : 13.501 **d (0.9) : 53.247**

Wentworth
% Clay (0-3.9 um) = 24.13
% Silt (3.91-31 um) = 51.24
% Coarse Silt (31 - 62.5 um) = 17.47
% Very Fine sand (62.5 - 125 um) = 4.64

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .24
% Coarse sand (500-1000 um) = 1.15
% Very Coarse sand (1000 - 2000 um) = 1.09



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.38	100
-0.5	(1414.21)	0.0	(1000.00)	0.71	99.62
0.0	(1000.00)	0.5	(707.10)	0.7	98.91
0.5	(707.10)	1.0	(500.00)	0.45	98.21
1.0	(500.00)	1.5	(353.55)	0.22	97.75
1.5	(353.55)	2.0	(250.00)	0.02	97.54
2.0	(250.00)	2.5	(176.78)	0	97.51
2.5	(176.78)	3.0	(125.00)	0.03	97.51
3.0	(125.00)	3.5	(88.39)	1.06	97.48
3.5	(88.39)	4.0	(62.50)	3.58	96.42
4.0	(62.50)	4.5	(44.19)	7.12	92.84
4.5	(44.19)	5.0	(31.25)	10.1	85.72
5.0	(31.25)	5.5	(22.10)	11.17	75.63
5.5	(22.10)	6.0	(15.63)	10.46	64.46
6.0	(15.63)	6.5	(11.05)	9.06	54
6.5	(11.05)	7.0	(7.81)	7.78	44.93
7.0	(7.81)	7.5	(5.52)	6.84	37.16
7.5	(5.52)	8.0	(3.90)	6.16	30.31

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.64	24.16
8.5	(2.76)	9.0	(1.95)	5.18	18.52
9.0	(1.95)	9.5	(1.38)	4.61	13.35
9.5	(1.38)	10.0	(0.98)	3.77	8.74
10.0	(0.98)	10.5	(0.69)	2.7	4.97
10.5	(0.69)	11.0	(0.49)	1.58	2.27
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 09-1-DM - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:29:47 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 23.86

D[4,3] = 78.73um = 3.67phi
D[v,0.05] = .73um = 10.41phi
D[v,0.16] = 1.36um = 9.52phi

D[v,0.5] = 4.46um = 7.81phi
D[v,0.84] = 19.95um = 5.65phi
D[v,0.95] = 724.52um = .46phi

Kurtosis = 16.92
Skewness = 4.09
Standard Deviation = 268.82 um = 1.9phi

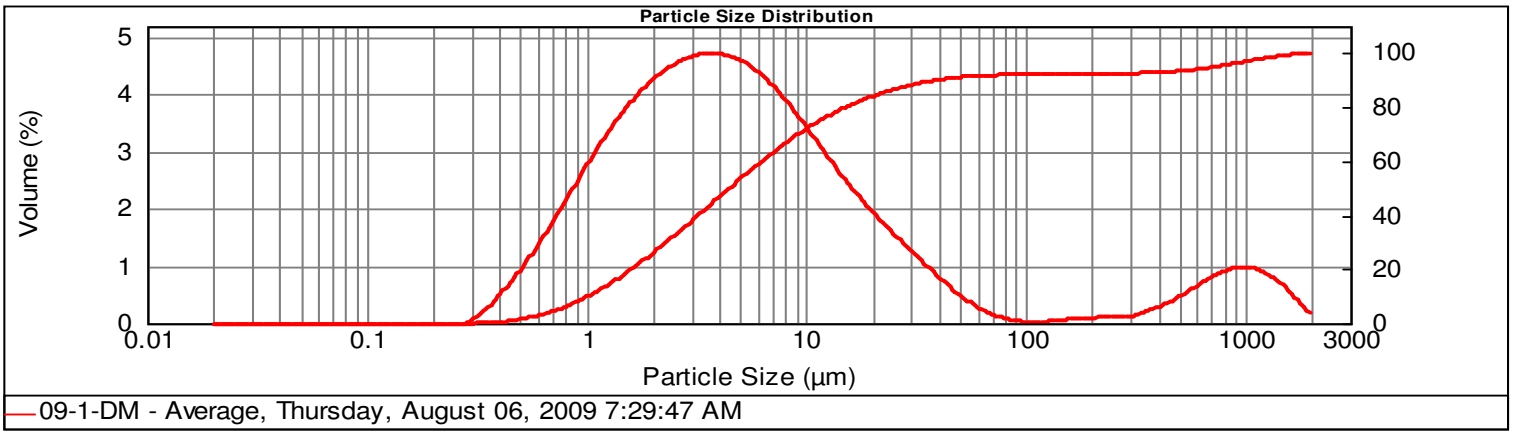
Inclusive SD (Sorting Coeff.) = 2.48 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.59 phi (Very Leptokurtic)

Inclusive Skewness = .3 (Fine Skewed)
Inclusive Mean = 7.66 phi (Silt)

USGS
% Clay (0-2 um) = 25.89
% Fine Silt (2-3.9 um) = 19.96

d (0.1) : 1.018 **um**
d (0.5) : 4.464 **d (0.9) : 38.436**

Wentworth
% Clay (0-3.9 um) = 45.85
% Silt (3.91-31 um) = 42.68
% Coarse Silt (31 - 62.5 um) = 3.16
% Very Fine sand (62.5 - 125 um) = .35
% Fine sand (125-250 um) = .35
% Medium sand (250-500 um) = 1.02
% Coarse sand (500-1000 um) = 3.56
% Very Coarse sand (1000 - 2000 um) = 3.03



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	1.02	100
-0.5	(1414.21)	0.0	(1000.00)	2.01	98.98
0.0	(1000.00)	0.5	(707.10)	2.11	96.97
0.5	(707.10)	1.0	(500.00)	1.46	94.87
1.0	(500.00)	1.5	(353.55)	0.73	93.41
1.5	(353.55)	2.0	(250.00)	0.29	92.68
2.0	(250.00)	2.5	(176.78)	0.22	92.39
2.5	(176.78)	3.0	(125.00)	0.13	92.17
3.0	(125.00)	3.5	(88.39)	0.06	92.04
3.5	(88.39)	4.0	(62.50)	0.29	91.98
4.0	(62.50)	4.5	(44.19)	0.99	91.69
4.5	(44.19)	5.0	(31.25)	2.11	90.7
5.0	(31.25)	5.5	(22.10)	3.35	88.59
5.5	(22.10)	6.0	(15.63)	4.72	85.24
6.0	(15.63)	6.5	(11.05)	6.35	80.52
6.5	(11.05)	7.0	(7.81)	8.13	74.18
7.0	(7.81)	7.5	(5.52)	9.64	66.05
7.5	(5.52)	8.0	(3.90)	10.5	56.4

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	10.61	45.9
8.5	(2.76)	9.0	(1.95)	10.05	35.29
9.0	(1.95)	9.5	(1.38)	8.87	25.24
9.5	(1.38)	10.0	(0.98)	7.11	16.37
10.0	(0.98)	10.5	(0.69)	5	9.26
10.5	(0.69)	11.0	(0.49)	2.92	4.26
11.0	(0.49)	11.5	(0.35)	1.2	1.33
11.5	(0.35)	12.0	(0.24)	0.13	0.13
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 09-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:20:40 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.34

D[4,3] = 45.3um = 4.46phi
D[v,0.05] = .98um = 10phi
D[v,0.16] = 2.36um = 8.72phi

D[v,0.5] = 14.25um = 6.13phi
D[v,0.84] = 44.28um = 4.5phi
D[v,0.95] = 79.2um = 3.66phi

Kurtosis = 55.95
Skewness = 7.21
Standard Deviation = 164.99 um = 2.6phi

Inclusive SD (Sorting Coeff.) = 2.02 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

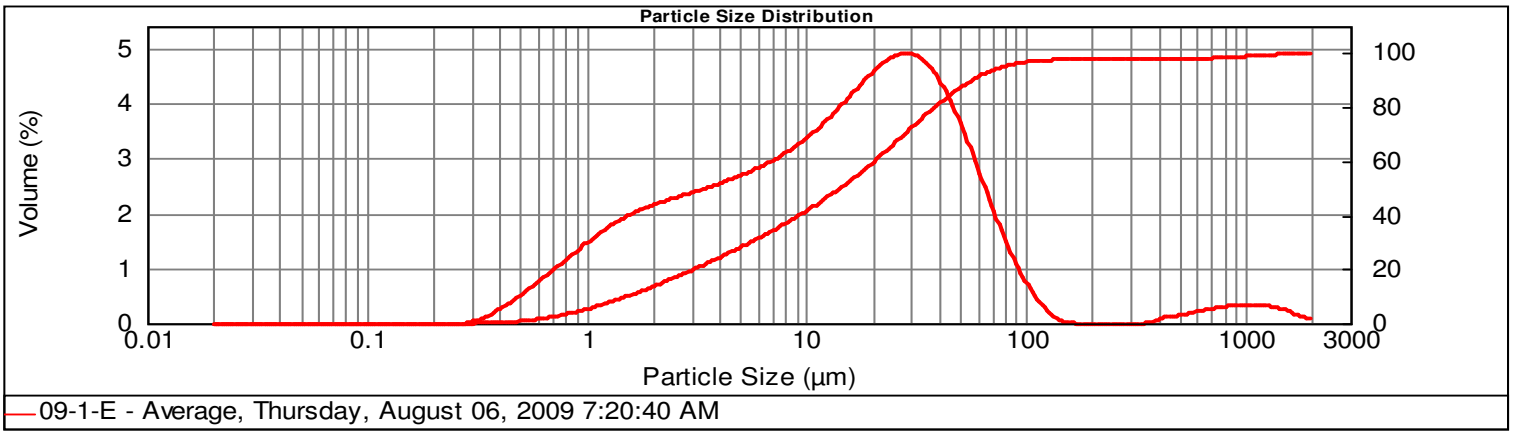
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 13.59
% Fine Silt (2-3.9 um) = 10.21

d (0.1) : 1.532 **um**
d (0.5) : 14.255 **d (0.9) : 56.968**

Wentworth
% Clay (0-3.9 um) = 23.8
% Silt (3.91-31 um) = 49.46
% Coarse Silt (31 - 62.5 um) = 18.48
% Very Fine sand (62.5 - 125 um) = 5.66

% Fine sand (125-250 um) = .12
% Medium sand (250-500 um) = .19
% Coarse sand (500-1000 um) = 1.17
% Very Coarse sand (1000 - 2000 um) = 1.13



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.4	100
-0.5	(1414.21)	0.0	(1000.00)	0.73	99.6
0.0	(1000.00)	0.5	(707.10)	0.71	98.87
0.5	(707.10)	1.0	(500.00)	0.46	98.16
1.0	(500.00)	1.5	(353.55)	0.19	97.7
1.5	(353.55)	2.0	(250.00)	0	97.51
2.0	(250.00)	2.5	(176.78)	0	97.51
2.5	(176.78)	3.0	(125.00)	0.12	97.51
3.0	(125.00)	3.5	(88.39)	1.42	97.4
3.5	(88.39)	4.0	(62.50)	4.23	95.97
4.0	(62.50)	4.5	(44.19)	7.79	91.74
4.5	(44.19)	5.0	(31.25)	10.43	83.95
5.0	(31.25)	5.5	(22.10)	11.04	73.52
5.5	(22.10)	6.0	(15.63)	10.06	62.48
6.0	(15.63)	6.5	(11.05)	8.62	52.42
6.5	(11.05)	7.0	(7.81)	7.42	43.8
7.0	(7.81)	7.5	(5.52)	6.58	36.38
7.5	(5.52)	8.0	(3.90)	5.97	29.79
8.0	(3.90)	8.5	(2.76)	5.5	23.83
8.5	(2.76)	9.0	(1.95)	5.07	18.33
9.0	(1.95)	9.5	(1.38)	4.54	13.26
9.5	(1.38)	10.0	(0.98)	3.74	8.71
10.0	(0.98)	10.5	(0.69)	2.69	4.97
10.5	(0.69)	11.0	(0.49)	1.59	2.28
11.0	(0.49)	11.5	(0.35)	0.64	0.7
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 09-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:25:09 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.80

D[4,3] = 42.33um = 4.56phi
D[v,0.05] = 1um = 9.96phi
D[v,0.16] = 2.45um = 8.67phi

D[v,0.5] = 14.68um = 6.09phi
D[v,0.84] = 44.37um = 4.49phi
D[v,0.95] = 76.78um = 3.7phi

Kurtosis = 66.49
Skewness = 7.85
Standard Deviation = 155.46 um = 2.69phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

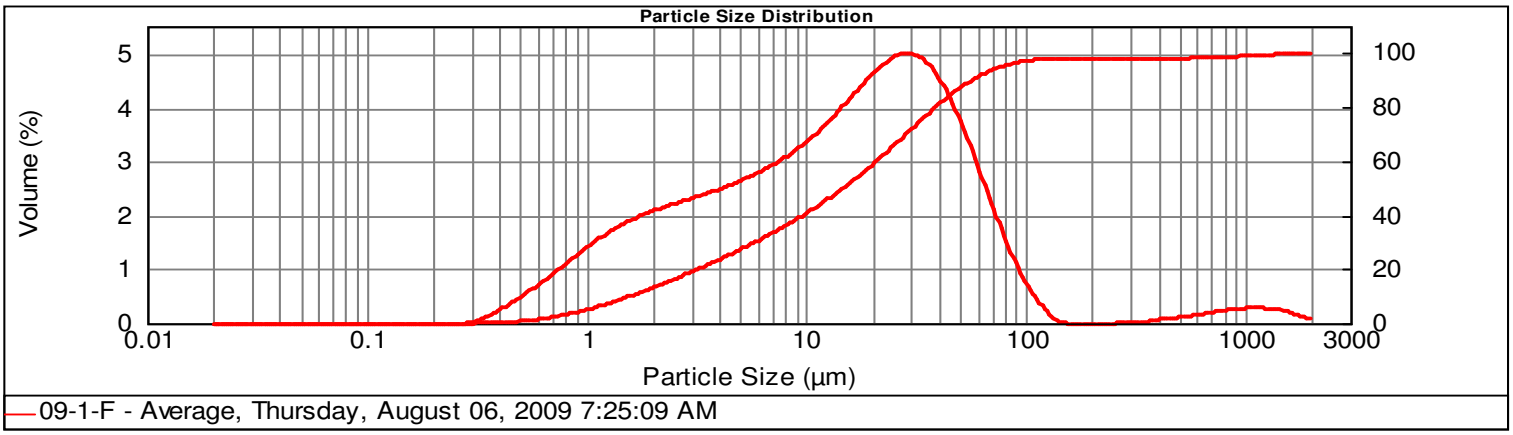
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 13.12
% Fine Silt (2-3.9 um) = 9.98

d (0.1) : 1.577 **um**
d (0.5) : 14.677 **d (0.9) : 56.564**

Wentworth
% Clay (0-3.9 um) = 23.1
% Silt (3.91-31 um) = 49.8
% Coarse Silt (31 - 62.5 um) = 19.06
% Very Fine sand (62.5 - 125 um) = 5.84

% Fine sand (125-250 um) = .08
% Medium sand (250-500 um) = .2
% Coarse sand (500-1000 um) = .91
% Very Coarse sand (1000 - 2000 um) = 1.01



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.38	100
-0.5	(1414.21)	0.0	(1000.00)	0.63	99.62
0.0	(1000.00)	0.5	(707.10)	0.56	98.99
0.5	(707.10)	1.0	(500.00)	0.35	98.43
1.0	(500.00)	1.5	(353.55)	0.17	98.08
1.5	(353.55)	2.0	(250.00)	0.04	97.92
2.0	(250.00)	2.5	(176.78)	0	97.88
2.5	(176.78)	3.0	(125.00)	0.08	97.88
3.0	(125.00)	3.5	(88.39)	1.44	97.8
3.5	(88.39)	4.0	(62.50)	4.4	96.35
4.0	(62.50)	4.5	(44.19)	8.07	91.96
4.5	(44.19)	5.0	(31.25)	10.73	83.89
5.0	(31.25)	5.5	(22.10)	11.28	73.16
5.5	(22.10)	6.0	(15.63)	10.2	61.88
6.0	(15.63)	6.5	(11.05)	8.69	51.68
6.5	(11.05)	7.0	(7.81)	7.43	42.99
7.0	(7.81)	7.5	(5.52)	6.54	35.56
7.5	(5.52)	8.0	(3.90)	5.89	29.02
8.0	(3.90)	8.5	(2.76)	5.39	23.13
8.5	(2.76)	9.0	(1.95)	4.94	17.74
9.0	(1.95)	9.5	(1.38)	4.41	12.8
9.5	(1.38)	10.0	(0.98)	3.62	8.39
10.0	(0.98)	10.5	(0.69)	2.59	4.78
10.5	(0.69)	11.0	(0.49)	1.52	2.18
11.0	(0.49)	11.5	(0.35)	0.61	0.66
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 10-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:34:19 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.13

D[4,3] = 186.85um = 2.42phi
D[v,0.05] = 1.13um = 9.79phi
D[v,0.16] = 3.09um = 8.34phi

D[v,0.5] = 20.2um = 5.63phi
D[v,0.84] = 481.09um = 1.06phi
D[v,0.95] = 1079.65um =-0.11phi

Kurtosis = 4.94
Skewness = 2.35
Standard Deviation = 368.95 um = 1.44phi

Inclusive SD (Sorting Coeff.) = 3.32 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.08 phi (Mesokurtic)

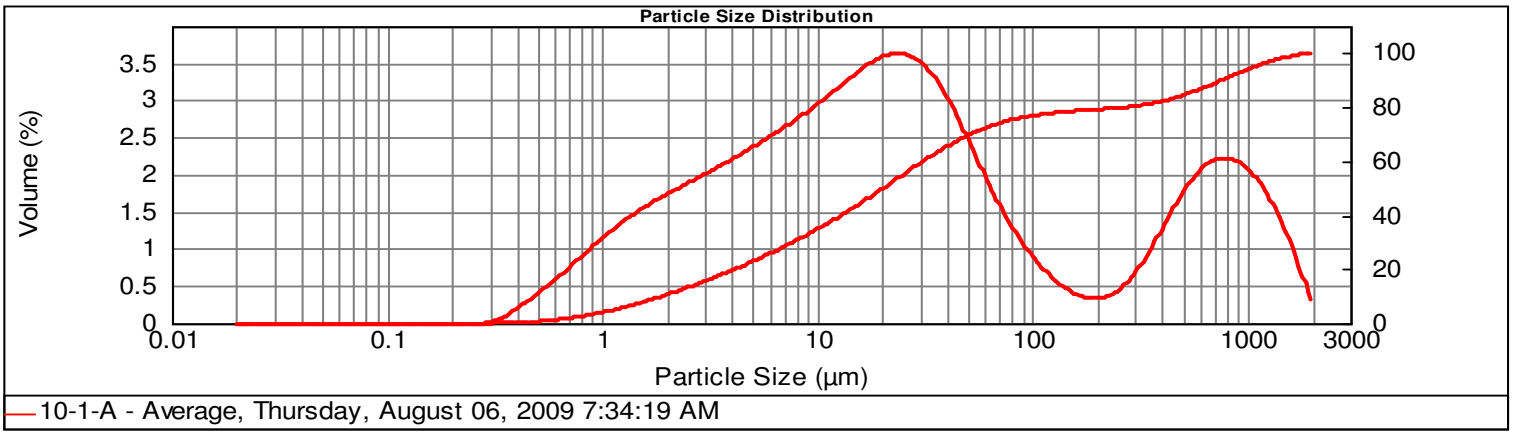
Inclusive Skewness = .21 (Fine Skewed)
Inclusive Mean = 5.01 phi (Silt)

USGS
% Clay (0-2 um) = 10.65
% Fine Silt (2-3.9 um) = 8.54

d (0.1) : 1.887 **um**
d (0.5) : 20.202 **d (0.9) : 756.449**

Wentworth
% Clay (0-3.9 um) = 19.19
% Silt (3.91-31 um) = 40.88
% Coarse Silt (31 - 62.5 um) = 12.68
% Very Fine sand (62.5 - 125 um) = 5.19

% Fine sand (125-250 um) = 1.82
% Medium sand (250-500 um) = 4.68
% Coarse sand (500-1000 um) = 9.55
% Very Coarse sand (1000 - 2000 um) = 6.02



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	1.97	100
-0.5	(1414.21)	0.0	(1000.00)	4.05	98.03
0.0	(1000.00)	0.5	(707.10)	4.96	93.98
0.5	(707.10)	1.0	(500.00)	4.59	89.02
1.0	(500.00)	1.5	(353.55)	3.13	84.43
1.5	(353.55)	2.0	(250.00)	1.54	81.3
2.0	(250.00)	2.5	(176.78)	0.8	79.76
2.5	(176.78)	3.0	(125.00)	1.01	78.95
3.0	(125.00)	3.5	(88.39)	1.88	77.94
3.5	(88.39)	4.0	(62.50)	3.32	76.06
4.0	(62.50)	4.5	(44.19)	5.3	72.75
4.5	(44.19)	5.0	(31.25)	7.19	67.44
5.0	(31.25)	5.5	(22.10)	8.13	60.25
5.5	(22.10)	6.0	(15.63)	8	52.12
6.0	(15.63)	6.5	(11.05)	7.3	44.12
6.5	(11.05)	7.0	(7.81)	6.52	36.82
7.0	(7.81)	7.5	(5.52)	5.85	30.29
7.5	(5.52)	8.0	(3.90)	5.24	24.45
8.0	(3.90)	8.5	(2.76)	4.67	19.21
8.5	(2.76)	9.0	(1.95)	4.15	14.54
9.0	(1.95)	9.5	(1.38)	3.61	10.38
9.5	(1.38)	10.0	(0.98)	2.92	6.77
10.0	(0.98)	10.5	(0.69)	2.09	3.85
10.5	(0.69)	11.0	(0.49)	1.23	1.76
11.0	(0.49)	11.5	(0.35)	0.49	0.53
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 10-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:39:25 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.06

D[4,3] = 52.98um = 4.24phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.42um = 8.69phi

D[v,0.5] = 13.77um = 6.18phi
D[v,0.84] = 43.23um = 4.53phi
D[v,0.95] = 93.89um = 3.41phi

Kurtosis = 41.24
Skewness = 6.19
Standard Deviation = 186.1 um = 2.43phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

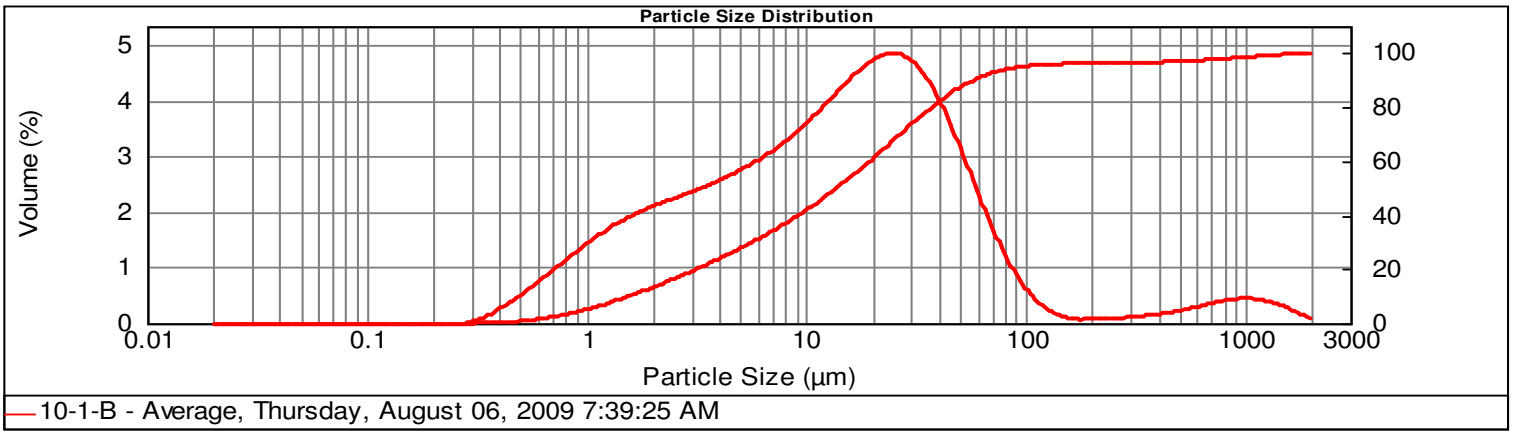
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 13.28
% Fine Silt (2-3.9 um) = 10.13

d (0.1) : 1.559 **um**
d (0.5) : 13.774 **d (0.9) : 57.748**

Wentworth
% Clay (0-3.9 um) = 23.4
% Silt (3.91-31 um) = 51.28
% Coarse Silt (31 - 62.5 um) = 16.55
% Very Fine sand (62.5 - 125 um) = 4.65

% Fine sand (125-250 um) = .46
% Medium sand (250-500 um) = .64
% Coarse sand (500-1000 um) = 1.61
% Very Coarse sand (1000 - 2000 um) = 1.41



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.49	100
-0.5	(1414.21)	0.0	(1000.00)	0.93	99.51
0.0	(1000.00)	0.5	(707.10)	0.94	98.59
0.5	(707.10)	1.0	(500.00)	0.66	97.64
1.0	(500.00)	1.5	(353.55)	0.39	96.98
1.5	(353.55)	2.0	(250.00)	0.25	96.59
2.0	(250.00)	2.5	(176.78)	0.17	96.34
2.5	(176.78)	3.0	(125.00)	0.29	96.17
3.0	(125.00)	3.5	(88.39)	1.21	95.88
3.5	(88.39)	4.0	(62.50)	3.44	94.67
4.0	(62.50)	4.5	(44.19)	6.69	91.23
4.5	(44.19)	5.0	(31.25)	9.61	84.54
5.0	(31.25)	5.5	(22.10)	10.91	74.92
5.5	(22.10)	6.0	(15.63)	10.49	64.01
6.0	(15.63)	6.5	(11.05)	9.22	53.52
6.5	(11.05)	7.0	(7.81)	7.9	44.3
7.0	(7.81)	7.5	(5.52)	6.87	36.4
7.5	(5.52)	8.0	(3.90)	6.1	29.53

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.5	23.43
8.5	(2.76)	9.0	(1.95)	4.98	17.93
9.0	(1.95)	9.5	(1.38)	4.42	12.95
9.5	(1.38)	10.0	(0.98)	3.64	8.53
10.0	(0.98)	10.5	(0.69)	2.63	4.89
10.5	(0.69)	11.0	(0.49)	1.56	2.26
11.0	(0.49)	11.5	(0.35)	0.64	0.7
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 10-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:53:31 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.63

D[4,3] = 42.66um = 4.55phi
D[v,0.05] = .97um = 10.01phi
D[v,0.16] = 2.32um = 8.75phi

D[v,0.5] = 13.51um = 6.21phi
D[v,0.84] = 42.26um = 4.56phi
D[v,0.95] = 76.19um = 3.71phi

Kurtosis = 61.05
Skewness = 7.45
Standard Deviation = 153.9 um = 2.7phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

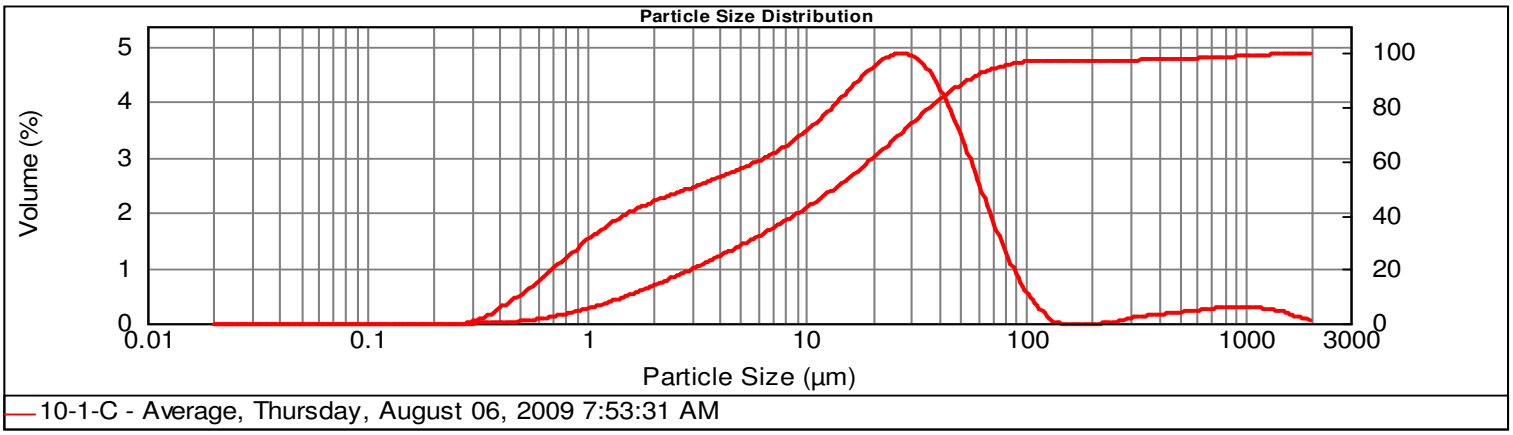
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.84
% Fine Silt (2-3.9 um) = 10.51

d (0.1) : 1.510 **um**
d (0.5) : 13.515 **d (0.9) : 54.475**

Wentworth
% Clay (0-3.9 um) = 24.34
% Silt (3.91-31 um) = 50.48
% Coarse Silt (31 - 62.5 um) = 17.64
% Very Fine sand (62.5 - 125 um) = 4.83

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .57
% Coarse sand (500-1000 um) = 1.18
% Very Coarse sand (1000 - 2000 um) = .93



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.32	100
-0.5	(1414.21)	0.0	(1000.00)	0.61	99.68
0.0	(1000.00)	0.5	(707.10)	0.66	99.07
0.5	(707.10)	1.0	(500.00)	0.52	98.42
1.0	(500.00)	1.5	(353.55)	0.37	97.89
1.5	(353.55)	2.0	(250.00)	0.2	97.52
2.0	(250.00)	2.5	(176.78)	0	97.32
2.5	(176.78)	3.0	(125.00)	0.03	97.32
3.0	(125.00)	3.5	(88.39)	1.09	97.29
3.5	(88.39)	4.0	(62.50)	3.73	96.19
4.0	(62.50)	4.5	(44.19)	7.28	92.46
4.5	(44.19)	5.0	(31.25)	10.11	85.18
5.0	(31.25)	5.5	(22.10)	10.99	75.08
5.5	(22.10)	6.0	(15.63)	10.21	64.09
6.0	(15.63)	6.5	(11.05)	8.85	53.87
6.5	(11.05)	7.0	(7.81)	7.65	45.02
7.0	(7.81)	7.5	(5.52)	6.81	37.37
7.5	(5.52)	8.0	(3.90)	6.19	30.56

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.68	24.37
8.5	(2.76)	9.0	(1.95)	5.19	18.69
9.0	(1.95)	9.5	(1.38)	4.62	13.5
9.5	(1.38)	10.0	(0.98)	3.8	8.88
10.0	(0.98)	10.5	(0.69)	2.74	5.07
10.5	(0.69)	11.0	(0.49)	1.62	2.33
11.0	(0.49)	11.5	(0.35)	0.65	0.71
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 10-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:48:33 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.75

D[4,3] = 43.26um = 4.53phi
D[v,0.05] = .96um = 10.02phi
D[v,0.16] = 2.29um = 8.77phi

D[v,0.5] = 13.33um = 6.23phi
D[v,0.84] = 42.39um = 4.56phi
D[v,0.95] = 75.79um = 3.72phi

Kurtosis = 58.84
Skewness = 7.38
Standard Deviation = 160.95 um = 2.64phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

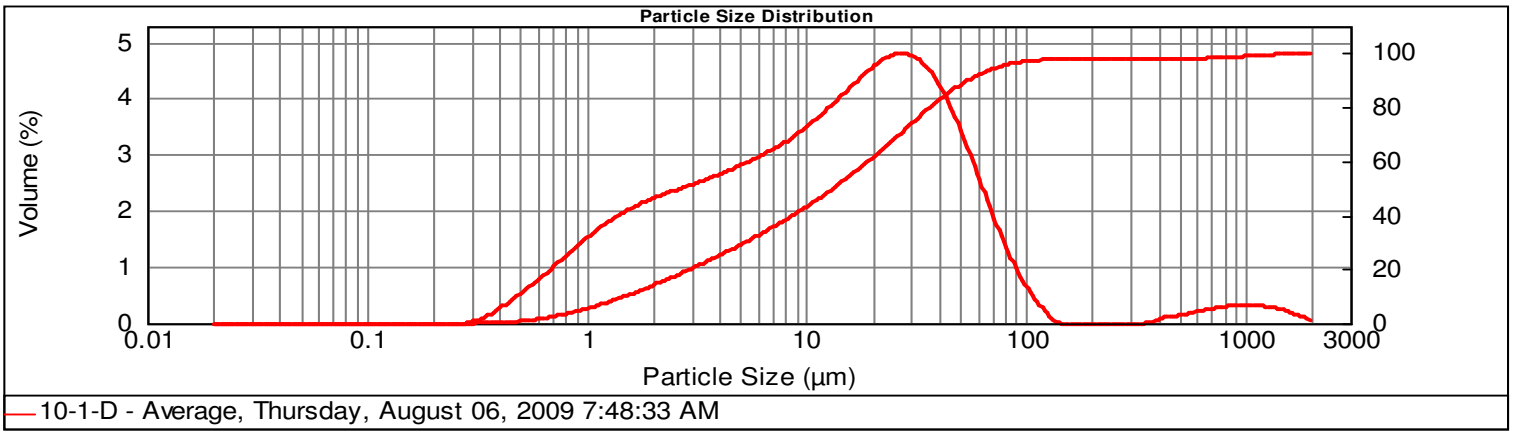
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.52 phi (Silt)

USGS
% Clay (0-2 um) = 14
% Fine Silt (2-3.9 um) = 10.57

d (0.1) : 1.497 **um**
d (0.5) : 13.332 **d (0.9) : 54.666**

Wentworth
% Clay (0-3.9 um) = 24.57
% Silt (3.91-31 um) = 50.27
% Coarse Silt (31 - 62.5 um) = 17.6
% Very Fine sand (62.5 - 125 um) = 5.14

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .19
% Coarse sand (500-1000 um) = 1.14
% Very Coarse sand (1000 - 2000 um) = 1.06



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.37	100
-0.5	(1414.21)	0.0	(1000.00)	0.69	99.63
0.0	(1000.00)	0.5	(707.10)	0.68	98.94
0.5	(707.10)	1.0	(500.00)	0.46	98.25
1.0	(500.00)	1.5	(353.55)	0.19	97.8
1.5	(353.55)	2.0	(250.00)	0	97.61
2.0	(250.00)	2.5	(176.78)	0	97.61
2.5	(176.78)	3.0	(125.00)	0.04	97.61
3.0	(125.00)	3.5	(88.39)	1.25	97.57
3.5	(88.39)	4.0	(62.50)	3.89	96.32
4.0	(62.50)	4.5	(44.19)	7.34	92.43
4.5	(44.19)	5.0	(31.25)	10.01	85.09
5.0	(31.25)	5.5	(22.10)	10.82	75.08
5.5	(22.10)	6.0	(15.63)	10.08	64.27
6.0	(15.63)	6.5	(11.05)	8.81	54.19
6.5	(11.05)	7.0	(7.81)	7.69	45.38
7.0	(7.81)	7.5	(5.52)	6.87	37.69
7.5	(5.52)	8.0	(3.90)	6.23	30.83
8.0	(3.90)	8.5	(2.76)	5.71	24.6
8.5	(2.76)	9.0	(1.95)	5.24	18.89
9.0	(1.95)	9.5	(1.38)	4.68	13.66
9.5	(1.38)	10.0	(0.98)	3.86	8.98
10.0	(0.98)	10.5	(0.69)	2.78	5.12
10.5	(0.69)	11.0	(0.49)	1.64	2.34
11.0	(0.49)	11.5	(0.35)	0.65	0.71
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 10-1-DM - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 8:02:48 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.83

D[4,3] = 73.73um = 3.76phi
D[v,0.05] = .73um = 10.42phi
D[v,0.16] = 1.37um = 9.52phi

D[v,0.5] = 4.79um = 7.7phi
D[v,0.84] = 23.74um = 5.4phi
D[v,0.95] = 675.25um = .57phi

Kurtosis = 18.88
Skewness = 4.31
Standard Deviation = 259.03 um = 1.95phi

Inclusive SD (Sorting Coeff.) = 2.52 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.46 phi (Leptokurtic)

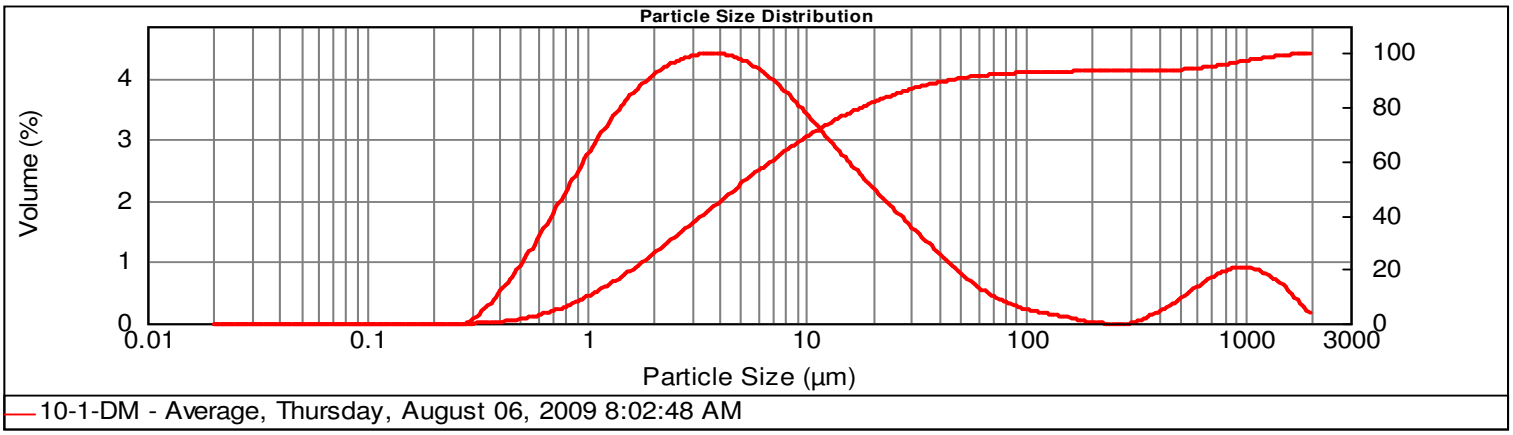
Inclusive Skewness = .29 (Fine Skewed)
Inclusive Mean = 7.54 phi (Silt)

USGS
% Clay (0-2 um) = 25.38
% Fine Silt (2-3.9 um) = 18.72

d (0.1) : 1.016 **um**
d (0.5) : 4.793 **d (0.9) : 44.544**

Wentworth
% Clay (0-3.9 um) = 44.11
% Silt (3.91-31 um) = 42.92
% Coarse Silt (31 - 62.5 um) = 4.66
% Very Fine sand (62.5 - 125 um) = 1.41

% Fine sand (125-250 um) = .26
% Medium sand (250-500 um) = .55
% Coarse sand (500-1000 um) = 3.28
% Very Coarse sand (1000 - 2000 um) = 2.82



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.95	100
-0.5	(1414.21)	0.0	(1000.00)	1.87	99.05
0.0	(1000.00)	0.5	(707.10)	1.96	97.18
0.5	(707.10)	1.0	(500.00)	1.32	95.22
1.0	(500.00)	1.5	(353.55)	0.52	93.91
1.5	(353.55)	2.0	(250.00)	0.04	93.39
2.0	(250.00)	2.5	(176.78)	0.02	93.35
2.5	(176.78)	3.0	(125.00)	0.24	93.33
3.0	(125.00)	3.5	(88.39)	0.48	93.09
3.5	(88.39)	4.0	(62.50)	0.92	92.61
4.0	(62.50)	4.5	(44.19)	1.74	91.69
4.5	(44.19)	5.0	(31.25)	2.84	89.95
5.0	(31.25)	5.5	(22.10)	4.04	87.1
5.5	(22.10)	6.0	(15.63)	5.29	83.07
6.0	(15.63)	6.5	(11.05)	6.64	77.78
6.5	(11.05)	7.0	(7.81)	8.01	71.14
7.0	(7.81)	7.5	(5.52)	9.16	63.13
7.5	(5.52)	8.0	(3.90)	9.82	53.98
8.0	(3.90)	8.5	(2.76)	9.92	44.15
8.5	(2.76)	9.0	(1.95)	9.48	34.24
9.0	(1.95)	9.5	(1.38)	8.51	24.76
9.5	(1.38)	10.0	(0.98)	6.96	16.25
10.0	(0.98)	10.5	(0.69)	4.98	9.29
10.5	(0.69)	11.0	(0.49)	2.95	4.31
11.0	(0.49)	11.5	(0.35)	1.23	1.36
11.5	(0.35)	12.0	(0.24)	0.13	0.13
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 10-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:43:55 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.61

D[4,3] = 45.29um = 4.46phi
D[v,0.05] = .98um = 9.99phi
D[v,0.16] = 2.36um = 8.72phi

D[v,0.5] = 14.05um = 6.15phi
D[v,0.84] = 43.4um = 4.53phi
D[v,0.95] = 76.87um = 3.7phi

Kurtosis = 55.25
Skewness = 7.16
Standard Deviation = 166.13 um = 2.59phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

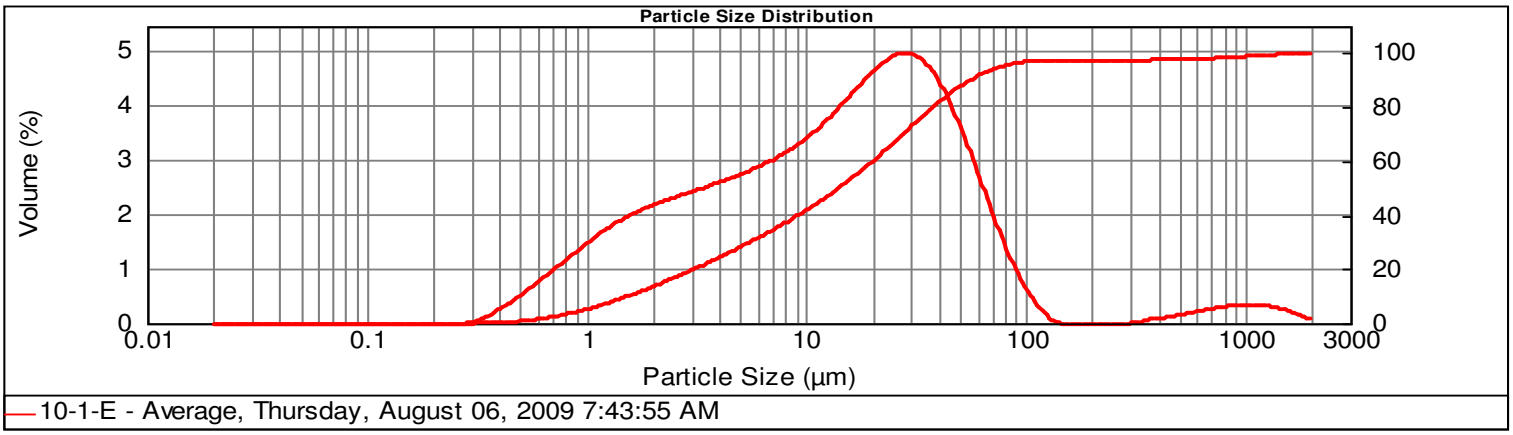
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 13.58
% Fine Silt (2-3.9 um) = 10.32

d (0.1) : 1.534 **um**
d (0.5) : 14.052 **d (0.9) : 55.627**

Wentworth
% Clay (0-3.9 um) = 23.9
% Silt (3.91-31 um) = 49.89
% Coarse Silt (31 - 62.5 um) = 18.39
% Very Fine sand (62.5 - 125 um) = 5.21

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .25
% Coarse sand (500-1000 um) = 1.19
% Very Coarse sand (1000 - 2000 um) = 1.14



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.41	100
-0.5	(1414.21)	0.0	(1000.00)	0.73	99.59
0.0	(1000.00)	0.5	(707.10)	0.72	98.86
0.5	(707.10)	1.0	(500.00)	0.47	98.15
1.0	(500.00)	1.5	(353.55)	0.23	97.67
1.5	(353.55)	2.0	(250.00)	0.02	97.45
2.0	(250.00)	2.5	(176.78)	0	97.42
2.5	(176.78)	3.0	(125.00)	0.03	97.42
3.0	(125.00)	3.5	(88.39)	1.19	97.39
3.5	(88.39)	4.0	(62.50)	4.02	96.2
4.0	(62.50)	4.5	(44.19)	7.69	92.18
4.5	(44.19)	5.0	(31.25)	10.44	84.49
5.0	(31.25)	5.5	(22.10)	11.11	74.05
5.5	(22.10)	6.0	(15.63)	10.13	62.94
6.0	(15.63)	6.5	(11.05)	8.68	52.81
6.5	(11.05)	7.0	(7.81)	7.47	44.13
7.0	(7.81)	7.5	(5.52)	6.66	36.66
7.5	(5.52)	8.0	(3.90)	6.07	30

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.57	23.93
8.5	(2.76)	9.0	(1.95)	5.11	18.36
9.0	(1.95)	9.5	(1.38)	4.55	13.25
9.5	(1.38)	10.0	(0.98)	3.74	8.7
10.0	(0.98)	10.5	(0.69)	2.69	4.96
10.5	(0.69)	11.0	(0.49)	1.58	2.28
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 10-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 7:58:00 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.23

D[4,3] = 52.26um = 4.26phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 15.79um = 5.99phi
D[v,0.84] = 48.9um = 4.35phi
D[v,0.95] = 90.28um = 3.47phi

Kurtosis = 45.51
Skewness = 6.51
Standard Deviation = 180.78 um = 2.47phi

Inclusive SD (Sorting Coeff.) = 2.06 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

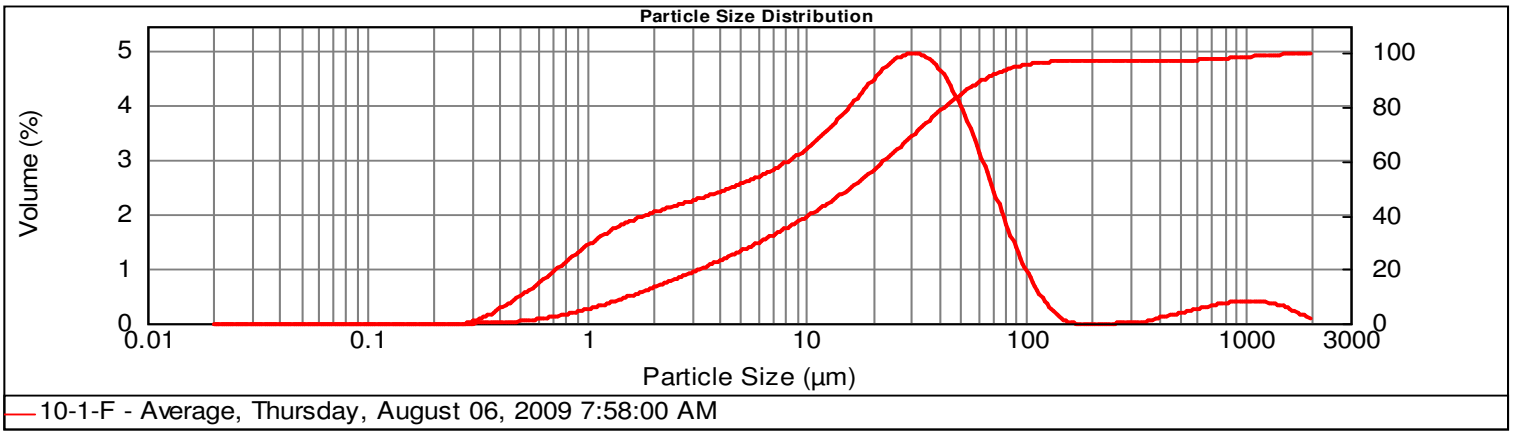
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 13.03
% Fine Silt (2-3.9 um) = 9.59

d (0.1) : 1.576 **um**
d (0.5) : 15.786 **d (0.9) : 63.281**

Wentworth
% Clay (0-3.9 um) = 22.62
% Silt (3.91-31 um) = 47.51
% Coarse Silt (31 - 62.5 um) = 19.62
% Very Fine sand (62.5 - 125 um) = 6.95

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = 1.43
% Very Coarse sand (1000 - 2000 um) = 1.36



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.48	100
-0.5	(1414.21)	0.0	(1000.00)	0.87	99.52
0.0	(1000.00)	0.5	(707.10)	0.86	98.64
0.5	(707.10)	1.0	(500.00)	0.57	97.79
1.0	(500.00)	1.5	(353.55)	0.26	97.21
1.5	(353.55)	2.0	(250.00)	0.03	96.96
2.0	(250.00)	2.5	(176.78)	0	96.93
2.5	(176.78)	3.0	(125.00)	0.23	96.93
3.0	(125.00)	3.5	(88.39)	1.89	96.7
3.5	(88.39)	4.0	(62.50)	5.05	94.81
4.0	(62.50)	4.5	(44.19)	8.57	89.75
4.5	(44.19)	5.0	(31.25)	10.79	81.18
5.0	(31.25)	5.5	(22.10)	10.95	70.4
5.5	(22.10)	6.0	(15.63)	9.72	59.45
6.0	(15.63)	6.5	(11.05)	8.21	49.74
6.5	(11.05)	7.0	(7.81)	7.02	41.53
7.0	(7.81)	7.5	(5.52)	6.22	34.51
7.5	(5.52)	8.0	(3.90)	5.64	28.29

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.17	22.65
8.5	(2.76)	9.0	(1.95)	4.76	17.48
9.0	(1.95)	9.5	(1.38)	4.28	12.72
9.5	(1.38)	10.0	(0.98)	3.57	8.44
10.0	(0.98)	10.5	(0.69)	2.6	4.87
10.5	(0.69)	11.0	(0.49)	1.56	2.26
11.0	(0.49)	11.5	(0.35)	0.64	0.7
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 11-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 4:19:52 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 31.87

D[4,3] = 86.4um = 3.53phi
D[v,0.05] = .86um = 10.18phi
D[v,0.16] = 1.9um = 9.04phi

D[v,0.5] = 10.5um = 6.57phi
D[v,0.84] = 46.87um = 4.42phi
D[v,0.95] = 709.26um = .5phi

Kurtosis = 17.5
Skewness = 4.15
Standard Deviation = 266.13 um = 1.91phi

Inclusive SD (Sorting Coeff.) = 2.62 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.21 phi (Leptokurtic)

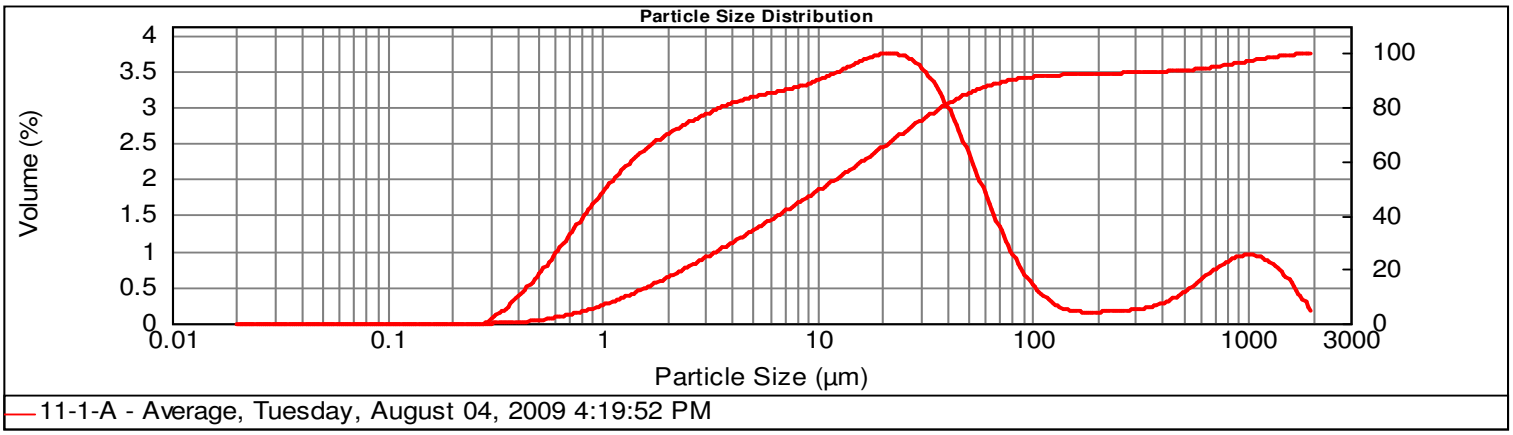
Inclusive Skewness = .09 (Near Symmetrical)
Inclusive Mean = 6.68 phi (Silt)

USGS
% Clay (0-2 um) = 16.87
% Fine Silt (2-3.9 um) = 12.39

d (0.1) : 1.294 **um**
d (0.5) : 10.497 **d (0.9) : 78.507**

Wentworth
% Clay (0-3.9 um) = 29.26
% Silt (3.91-31 um) = 46.35
% Coarse Silt (31 - 62.5 um) = 12.39
% Very Fine sand (62.5 - 125 um) = 3.76

% Fine sand (125-250 um) = .78
% Medium sand (250-500 um) = 1.13
% Coarse sand (500-1000 um) = 3.3
% Very Coarse sand (1000 - 2000 um) = 3.03



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	1.05	100
-0.5	(1414.21)	0.0	(1000.00)	1.99	98.95
0.0	(1000.00)	0.5	(707.10)	1.98	96.97
0.5	(707.10)	1.0	(500.00)	1.32	94.99
1.0	(500.00)	1.5	(353.55)	0.7	93.67
1.5	(353.55)	2.0	(250.00)	0.43	92.97
2.0	(250.00)	2.5	(176.78)	0.36	92.54
2.5	(176.78)	3.0	(125.00)	0.42	92.18
3.0	(125.00)	3.5	(88.39)	1.07	91.76
3.5	(88.39)	4.0	(62.50)	2.69	90.69
4.0	(62.50)	4.5	(44.19)	5.03	88
4.5	(44.19)	5.0	(31.25)	7.18	82.98
5.0	(31.25)	5.5	(22.10)	8.3	75.8
5.5	(22.10)	6.0	(15.63)	8.39	67.49
6.0	(15.63)	6.5	(11.05)	7.97	59.11
6.5	(11.05)	7.0	(7.81)	7.54	51.14
7.0	(7.81)	7.5	(5.52)	7.27	43.6
7.5	(5.52)	8.0	(3.90)	7.03	36.32

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.66	29.29
8.5	(2.76)	9.0	(1.95)	6.17	22.63
9.0	(1.95)	9.5	(1.38)	5.52	16.47
9.5	(1.38)	10.0	(0.98)	4.59	10.94
10.0	(0.98)	10.5	(0.69)	3.36	6.35
10.5	(0.69)	11.0	(0.49)	2.03	2.99
11.0	(0.49)	11.5	(0.35)	0.87	0.97
11.5	(0.35)	12.0	(0.24)	0.1	0.1
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 11-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 4:24:25 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 23.08

D[4,3] = 53.91um = 4.21phi
D[v,0.05] = .98um = 9.99phi
D[v,0.16] = 2.42um = 8.69phi

D[v,0.5] = 13.85um = 6.17phi
D[v,0.84] = 43.81um = 4.51phi
D[v,0.95] = 88.84um = 3.49phi

Kurtosis = 39.28
Skewness = 6.07
Standard Deviation = 190.59 um = 2.39phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

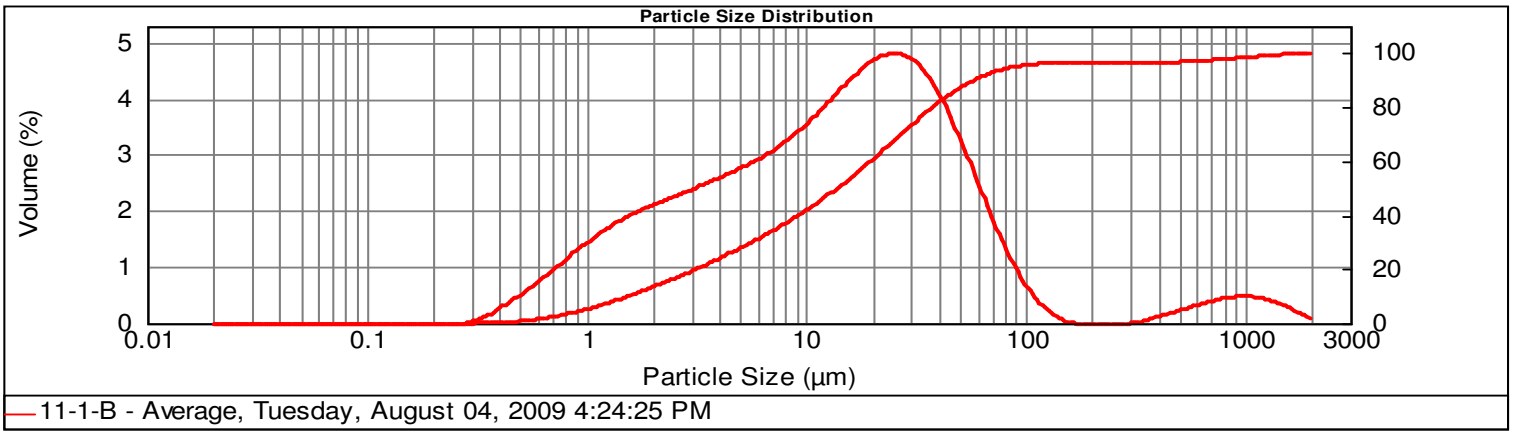
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.46 phi (Silt)

USGS
% Clay (0-2 um) = 13.32
% Fine Silt (2-3.9 um) = 10.18

d (0.1) : 1.553 **um**
d (0.5) : 13.849 **d (0.9) : 58.077**

Wentworth
% Clay (0-3.9 um) = 23.5
% Silt (3.91-31 um) = 50.76
% Coarse Silt (31 - 62.5 um) = 16.94
% Very Fine sand (62.5 - 125 um) = 5.07

% Fine sand (125-250 um) = .16
% Medium sand (250-500 um) = .34
% Coarse sand (500-1000 um) = 1.73
% Very Coarse sand (1000 - 2000 um) = 1.49



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.51	100
-0.5	(1414.21)	0.0	(1000.00)	0.98	99.49
0.0	(1000.00)	0.5	(707.10)	1.02	98.51
0.5	(707.10)	1.0	(500.00)	0.71	97.48
1.0	(500.00)	1.5	(353.55)	0.32	96.77
1.5	(353.55)	2.0	(250.00)	0.02	96.46
2.0	(250.00)	2.5	(176.78)	0	96.44
2.5	(176.78)	3.0	(125.00)	0.16	96.44
3.0	(125.00)	3.5	(88.39)	1.31	96.28
3.5	(88.39)	4.0	(62.50)	3.76	94.97
4.0	(62.50)	4.5	(44.19)	6.99	91.21
4.5	(44.19)	5.0	(31.25)	9.71	84.22
5.0	(31.25)	5.5	(22.10)	10.83	74.51
5.5	(22.10)	6.0	(15.63)	10.36	63.68
6.0	(15.63)	6.5	(11.05)	9.09	53.32
6.5	(11.05)	7.0	(7.81)	7.78	44.24
7.0	(7.81)	7.5	(5.52)	6.81	36.46
7.5	(5.52)	8.0	(3.90)	6.12	29.65

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.54	23.53
8.5	(2.76)	9.0	(1.95)	5	17.99
9.0	(1.95)	9.5	(1.38)	4.42	13
9.5	(1.38)	10.0	(0.98)	3.64	8.58
10.0	(0.98)	10.5	(0.69)	2.64	4.94
10.5	(0.69)	11.0	(0.49)	1.58	2.29
11.0	(0.49)	11.5	(0.35)	0.65	0.71
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 11-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 4:28:57 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 27.57

D[4,3] = 57.35um = 4.12phi
D[v,0.05] = .96um = 10.03phi
D[v,0.16] = 2.3um = 8.77phi

D[v,0.5] = 13.31um = 6.23phi
D[v,0.84] = 43.01um = 4.54phi
D[v,0.95] = 89.47um = 3.48phi

Kurtosis = 34.15
Skewness = 5.69
Standard Deviation = 201.89 um = 2.31phi

Inclusive SD (Sorting Coeff.) = 2.05 phi (Very Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

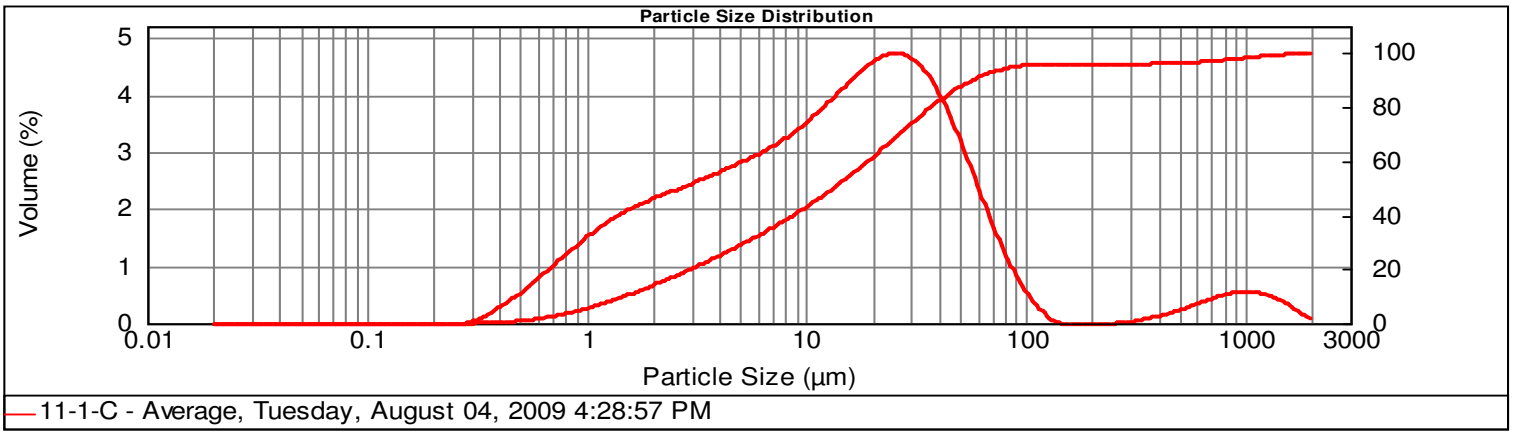
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.98
% Fine Silt (2-3.9 um) = 10.47

d (0.1) : 1.491 **um**
d (0.5) : 13.311 **d (0.9) : 57.013**

Wentworth
% Clay (0-3.9 um) = 24.45
% Silt (3.91-31 um) = 50.39
% Coarse Silt (31 - 62.5 um) = 16.63
% Very Fine sand (62.5 - 125 um) = 4.5

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .39
% Coarse sand (500-1000 um) = 1.91
% Very Coarse sand (1000 - 2000 um) = 1.71



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.57	100
-0.5	(1414.21)	0.0	(1000.00)	1.15	99.43
0.0	(1000.00)	0.5	(707.10)	1.16	98.29
0.5	(707.10)	1.0	(500.00)	0.75	97.13
1.0	(500.00)	1.5	(353.55)	0.33	96.38
1.5	(353.55)	2.0	(250.00)	0.05	96.05
2.0	(250.00)	2.5	(176.78)	0	95.99
2.5	(176.78)	3.0	(125.00)	0.03	95.99
3.0	(125.00)	3.5	(88.39)	1.03	95.96
3.5	(88.39)	4.0	(62.50)	3.46	94.93
4.0	(62.50)	4.5	(44.19)	6.8	91.47
4.5	(44.19)	5.0	(31.25)	9.59	84.67
5.0	(31.25)	5.5	(22.10)	10.66	75.08
5.5	(22.10)	6.0	(15.63)	10.13	64.42
6.0	(15.63)	6.5	(11.05)	8.92	54.29
6.5	(11.05)	7.0	(7.81)	7.75	45.36
7.0	(7.81)	7.5	(5.52)	6.89	37.61
7.5	(5.52)	8.0	(3.90)	6.25	30.72
8.0	(3.90)	8.5	(2.76)	5.68	24.48
8.5	(2.76)	9.0	(1.95)	5.16	18.8
9.0	(1.95)	9.5	(1.38)	4.6	13.64
9.5	(1.38)	10.0	(0.98)	3.83	9.04
10.0	(0.98)	10.5	(0.69)	2.79	5.21
10.5	(0.69)	11.0	(0.49)	1.67	2.42
11.0	(0.49)	11.5	(0.35)	0.68	0.75
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 11-1D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 4:33:20 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.50

D[4,3] = 47.48um = 4.4phi
D[v,0.05] = .98um = 9.99phi
D[v,0.16] = 2.38um = 8.72phi

D[v,0.5] = 13.41um = 6.22phi
D[v,0.84] = 41.39um = 4.59phi
D[v,0.95] = 75.53um = 3.73phi

Kurtosis = 48.6
Skewness = 6.76
Standard Deviation = 177.7 um = 2.49phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

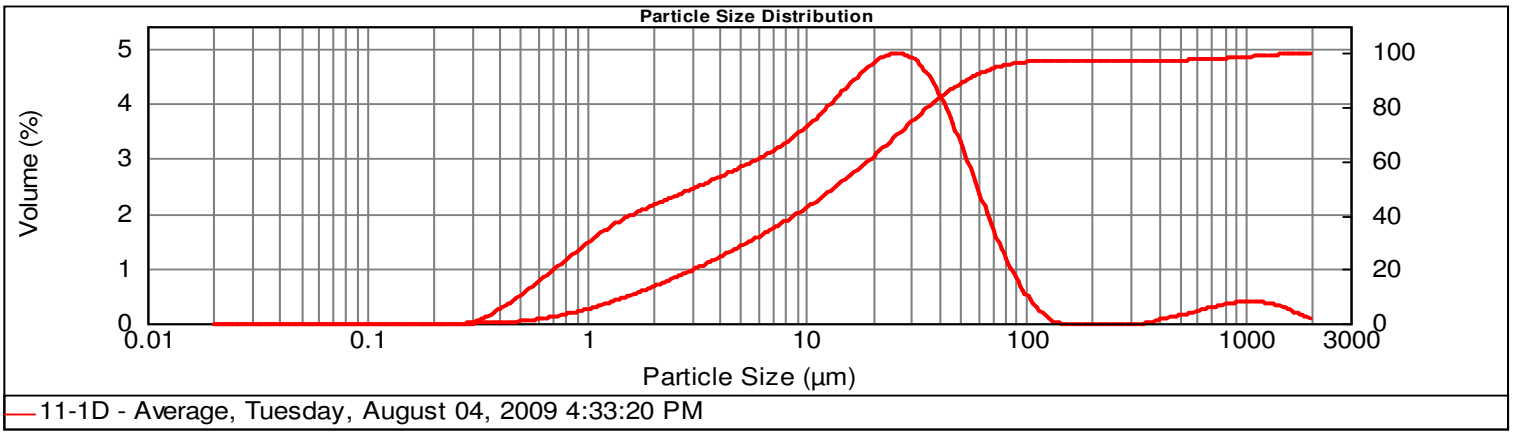
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.5
% Fine Silt (2-3.9 um) = 10.43

d (0.1) : 1.540 **um**
d (0.5) : 13.411 **d (0.9) : 53.486**

Wentworth
% Clay (0-3.9 um) = 23.93
% Silt (3.91-31 um) = 51.55
% Coarse Silt (31 - 62.5 um) = 17.22
% Very Fine sand (62.5 - 125 um) = 4.48

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .16
% Coarse sand (500-1000 um) = 1.3
% Very Coarse sand (1000 - 2000 um) = 1.33



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.48	100
-0.5	(1414.21)	0.0	(1000.00)	0.85	99.52
0.0	(1000.00)	0.5	(707.10)	0.81	98.67
0.5	(707.10)	1.0	(500.00)	0.49	97.86
1.0	(500.00)	1.5	(353.55)	0.16	97.38
1.5	(353.55)	2.0	(250.00)	0	97.21
2.0	(250.00)	2.5	(176.78)	0	97.21
2.5	(176.78)	3.0	(125.00)	0.03	97.21
3.0	(125.00)	3.5	(88.39)	1	97.18
3.5	(88.39)	4.0	(62.50)	3.48	96.18
4.0	(62.50)	4.5	(44.19)	7	92.7
4.5	(44.19)	5.0	(31.25)	9.97	85.7
5.0	(31.25)	5.5	(22.10)	11.08	75.73
5.5	(22.10)	6.0	(15.63)	10.46	64.65
6.0	(15.63)	6.5	(11.05)	9.12	54.19
6.5	(11.05)	7.0	(7.81)	7.87	45.07
7.0	(7.81)	7.5	(5.52)	6.96	37.21
7.5	(5.52)	8.0	(3.90)	6.29	30.24

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.68	23.96
8.5	(2.76)	9.0	(1.95)	5.11	18.28
9.0	(1.95)	9.5	(1.38)	4.51	13.17
9.5	(1.38)	10.0	(0.98)	3.71	8.66
10.0	(0.98)	10.5	(0.69)	2.68	4.95
10.5	(0.69)	11.0	(0.49)	1.58	2.27
11.0	(0.49)	11.5	(0.35)	0.63	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 11-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 4:10:38 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.11

D[4,3] = 43.66um = 4.52phi
D[v,0.05] = .98um = 9.99phi
D[v,0.16] = 2.36um = 8.73phi

D[v,0.5] = 13.29um = 6.23phi
D[v,0.84] = 42.24um = 4.57phi
D[v,0.95] = 78.41um = 3.67phi

Kurtosis = 57.74
Skewness = 7.27
Standard Deviation = 159.06 um = 2.65phi

Inclusive SD (Sorting Coeff.) = 2 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

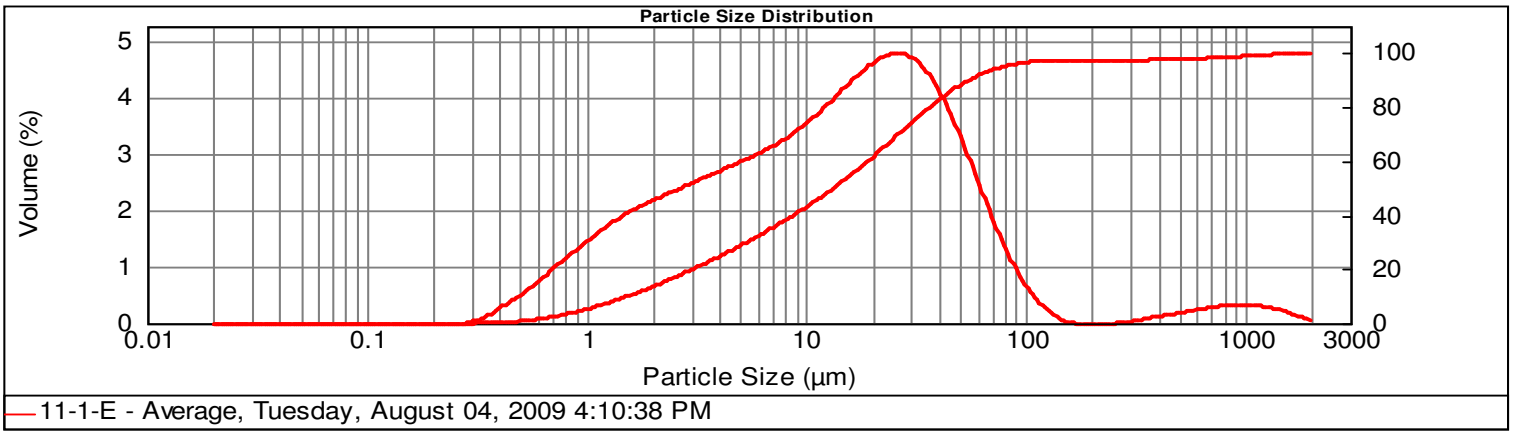
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.6
% Fine Silt (2-3.9 um) = 10.6

d (0.1) : 1.534 **um**
d (0.5) : 13.290 **d (0.9) : 55.030**

Wentworth
% Clay (0-3.9 um) = 24.2
% Silt (3.91-31 um) = 50.92
% Coarse Silt (31 - 62.5 um) = 17.08
% Very Fine sand (62.5 - 125 um) = 5.05

% Fine sand (125-250 um) = .14
% Medium sand (250-500 um) = .36
% Coarse sand (500-1000 um) = 1.24
% Very Coarse sand (1000 - 2000 um) = 1.01



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.34	100
-0.5	(1414.21)	0.0	(1000.00)	0.66	99.66
0.0	(1000.00)	0.5	(707.10)	0.71	98.99
0.5	(707.10)	1.0	(500.00)	0.53	98.28
1.0	(500.00)	1.5	(353.55)	0.3	97.75
1.5	(353.55)	2.0	(250.00)	0.07	97.46
2.0	(250.00)	2.5	(176.78)	0	97.39
2.5	(176.78)	3.0	(125.00)	0.14	97.39
3.0	(125.00)	3.5	(88.39)	1.29	97.25
3.5	(88.39)	4.0	(62.50)	3.75	95.95
4.0	(62.50)	4.5	(44.19)	7.05	92.2
4.5	(44.19)	5.0	(31.25)	9.78	85.15
5.0	(31.25)	5.5	(22.10)	10.79	75.37
5.5	(22.10)	6.0	(15.63)	10.22	64.57
6.0	(15.63)	6.5	(11.05)	8.97	54.35
6.5	(11.05)	7.0	(7.81)	7.81	45.38
7.0	(7.81)	7.5	(5.52)	6.98	37.57
7.5	(5.52)	8.0	(3.90)	6.36	30.58

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.77	24.22
8.5	(2.76)	9.0	(1.95)	5.19	18.45
9.0	(1.95)	9.5	(1.38)	4.56	13.26
9.5	(1.38)	10.0	(0.98)	3.73	8.7
10.0	(0.98)	10.5	(0.69)	2.68	4.97
10.5	(0.69)	11.0	(0.49)	1.59	2.28
11.0	(0.49)	11.5	(0.35)	0.64	0.7
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 11-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 4:15:16 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.44

D[4,3] = 49.97um = 4.32phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.4um = 8.7phi

D[v,0.5] = 13.91um = 6.17phi
D[v,0.84] = 45.94um = 4.44phi
D[v,0.95] = 88.75um = 3.49phi

Kurtosis = 46.58
Skewness = 6.59
Standard Deviation = 177.59 um = 2.49phi

Inclusive SD (Sorting Coeff.) = 2.05 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

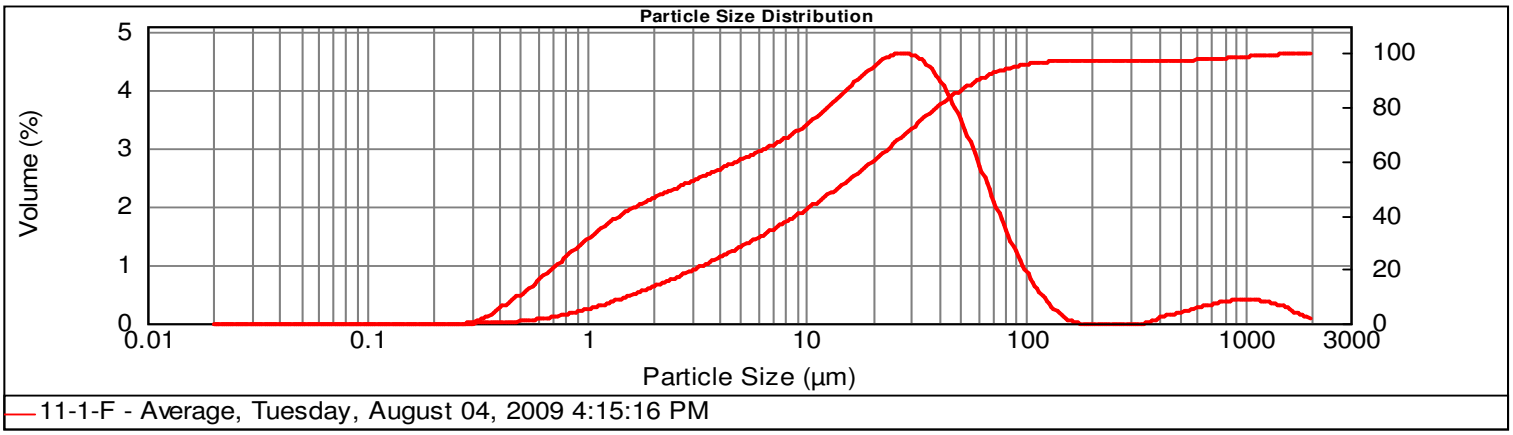
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 13.38
% Fine Silt (2-3.9 um) = 10.42

d (0.1) : 1.554 **um**
d (0.5) : 13.913 **d (0.9) : 60.575**

Wentworth
% Clay (0-3.9 um) = 23.79
% Silt (3.91-31 um) = 49.16
% Coarse Silt (31 - 62.5 um) = 17.6
% Very Fine sand (62.5 - 125 um) = 6.17

% Fine sand (125-250 um) = .3
% Medium sand (250-500 um) = .23
% Coarse sand (500-1000 um) = 1.44
% Very Coarse sand (1000 - 2000 um) = 1.3



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.45	100
-0.5	(1414.21)	0.0	(1000.00)	0.85	99.55
0.0	(1000.00)	0.5	(707.10)	0.86	98.7
0.5	(707.10)	1.0	(500.00)	0.58	97.84
1.0	(500.00)	1.5	(353.55)	0.23	97.26
1.5	(353.55)	2.0	(250.00)	0	97.03
2.0	(250.00)	2.5	(176.78)	0	97.03
2.5	(176.78)	3.0	(125.00)	0.3	97.03
3.0	(125.00)	3.5	(88.39)	1.76	96.73
3.5	(88.39)	4.0	(62.50)	4.41	94.97
4.0	(62.50)	4.5	(44.19)	7.54	90.55
4.5	(44.19)	5.0	(31.25)	9.83	83.02
5.0	(31.25)	5.5	(22.10)	10.45	73.19
5.5	(22.10)	6.0	(15.63)	9.74	62.74
6.0	(15.63)	6.5	(11.05)	8.58	53
6.5	(11.05)	7.0	(7.81)	7.55	44.43
7.0	(7.81)	7.5	(5.52)	6.82	36.87
7.5	(5.52)	8.0	(3.90)	6.23	30.06

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.67	23.82
8.5	(2.76)	9.0	(1.95)	5.11	18.16
9.0	(1.95)	9.5	(1.38)	4.5	13.05
9.5	(1.38)	10.0	(0.98)	3.68	8.55
10.0	(0.98)	10.5	(0.69)	2.64	4.87
10.5	(0.69)	11.0	(0.49)	1.55	2.23
11.0	(0.49)	11.5	(0.35)	0.62	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 12-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 3:12:18 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.19

D[4,3] = 30.93um = 5.02phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.66um = 8.55phi

D[v,0.5] = 14.73um = 6.09phi
D[v,0.84] = 41.86um = 4.58phi
D[v,0.95] = 69.12um = 3.85phi

Kurtosis = 120.44
Skewness = 10.21
Standard Deviation = 97.38 um = 3.36phi

Inclusive SD (Sorting Coeff.) = 1.91 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

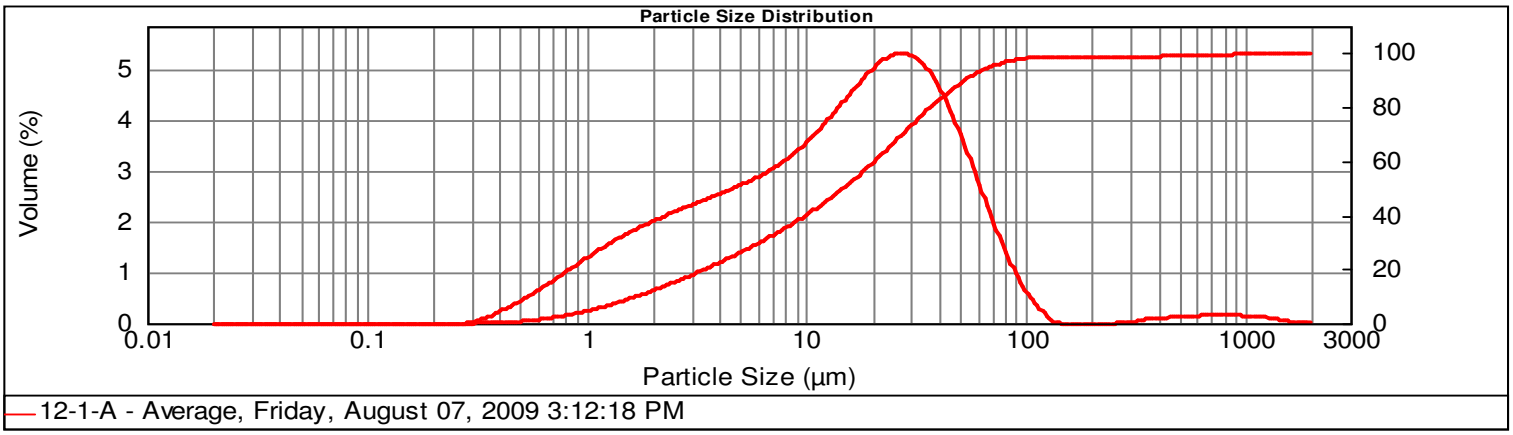
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.41 phi (Silt)

USGS
% Clay (0-2 um) = 12.05
% Fine Silt (2-3.9 um) = 9.89

d (0.1) : 1.700 **um**
d (0.5) : 14.726 **d (0.9) : 52.604**

Wentworth
% Clay (0-3.9 um) = 21.94
% Silt (3.91-31 um) = 52.38
% Coarse Silt (31 - 62.5 um) = 19.13
% Very Fine sand (62.5 - 125 um) = 5.23

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = .67
% Very Coarse sand (1000 - 2000 um) = .33



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.27	99.94
0.0	(1000.00)	0.5	(707.10)	0.35	99.67
0.5	(707.10)	1.0	(500.00)	0.33	99.32
1.0	(500.00)	1.5	(353.55)	0.23	99
1.5	(353.55)	2.0	(250.00)	0.05	98.76
2.0	(250.00)	2.5	(176.78)	0	98.71
2.5	(176.78)	3.0	(125.00)	0.03	98.71
3.0	(125.00)	3.5	(88.39)	1.19	98.68
3.5	(88.39)	4.0	(62.50)	4.05	97.49
4.0	(62.50)	4.5	(44.19)	7.89	93.44
4.5	(44.19)	5.0	(31.25)	10.97	85.56
5.0	(31.25)	5.5	(22.10)	11.92	74.59
5.5	(22.10)	6.0	(15.63)	10.96	62.67
6.0	(15.63)	6.5	(11.05)	9.27	51.71
6.5	(11.05)	7.0	(7.81)	7.76	42.44
7.0	(7.81)	7.5	(5.52)	6.71	34.68
7.5	(5.52)	8.0	(3.90)	6	27.97

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.41	21.96
8.5	(2.76)	9.0	(1.95)	4.81	16.55
9.0	(1.95)	9.5	(1.38)	4.13	11.74
9.5	(1.38)	10.0	(0.98)	3.3	7.61
10.0	(0.98)	10.5	(0.69)	2.34	4.31
10.5	(0.69)	11.0	(0.49)	1.37	1.98
11.0	(0.49)	11.5	(0.35)	0.55	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 12-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 3:16:52 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.70

D[4,3] = 31.5um = 4.99phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.61um = 8.58phi

D[v,0.5] = 14.19um = 6.14phi
D[v,0.84] = 40.73um = 4.62phi
D[v,0.95] = 67.96um = 3.88phi

Kurtosis = 118.91
Skewness = 10.2
Standard Deviation = 106.28 um = 3.23phi

Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

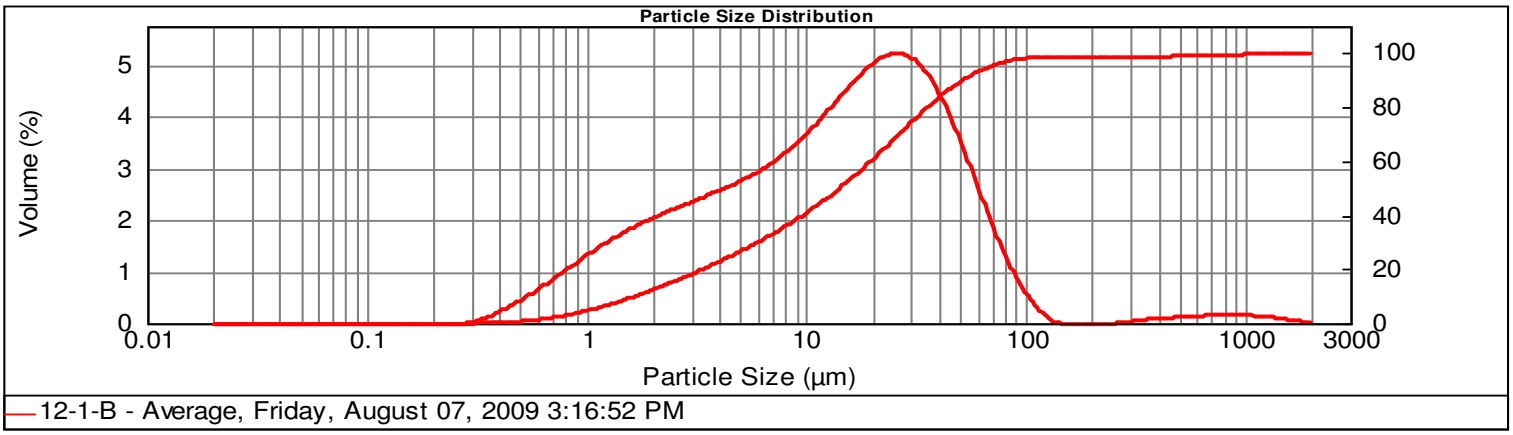
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 12.29
% Fine Silt (2-3.9 um) = 10.01

d (0.1) : 1.672 **um**
d (0.5) : 14.188 **d (0.9) : 51.407**

Wentworth
% Clay (0-3.9 um) = 22.3
% Silt (3.91-31 um) = 53.11
% Coarse Silt (31 - 62.5 um) = 18.35
% Very Fine sand (62.5 - 125 um) = 4.85

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = .66
% Very Coarse sand (1000 - 2000 um) = .41



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.12	100
-0.5	(1414.21)	0.0	(1000.00)	0.3	99.88
0.0	(1000.00)	0.5	(707.10)	0.35	99.59
0.5	(707.10)	1.0	(500.00)	0.31	99.23
1.0	(500.00)	1.5	(353.55)	0.22	98.92
1.5	(353.55)	2.0	(250.00)	0.07	98.71
2.0	(250.00)	2.5	(176.78)	0	98.64
2.5	(176.78)	3.0	(125.00)	0.03	98.64
3.0	(125.00)	3.5	(88.39)	1.07	98.61
3.5	(88.39)	4.0	(62.50)	3.78	97.54
4.0	(62.50)	4.5	(44.19)	7.49	93.76
4.5	(44.19)	5.0	(31.25)	10.6	86.27
5.0	(31.25)	5.5	(22.10)	11.77	75.68
5.5	(22.10)	6.0	(15.63)	11.09	63.91
6.0	(15.63)	6.5	(11.05)	9.54	52.82
6.5	(11.05)	7.0	(7.81)	8.01	43.28
7.0	(7.81)	7.5	(5.52)	6.86	35.28
7.5	(5.52)	8.0	(3.90)	6.08	28.41

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.47	22.33
8.5	(2.76)	9.0	(1.95)	4.88	16.85
9.0	(1.95)	9.5	(1.38)	4.21	11.98
9.5	(1.38)	10.0	(0.98)	3.37	7.77
10.0	(0.98)	10.5	(0.69)	2.39	4.4
10.5	(0.69)	11.0	(0.49)	1.4	2.01
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 12-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 3:21:26 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.66

D[4,3] = 33.86um = 4.88phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.65um = 8.56phi

D[v,0.5] = 14.61um = 6.1phi
D[v,0.84] = 41.7um = 4.58phi
D[v,0.95] = 69.84um = 3.84phi

Kurtosis = 97.32
Skewness = 9.23
Standard Deviation = 113.19 um = 3.14phi

Inclusive SD (Sorting Coeff.) = 1.91 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

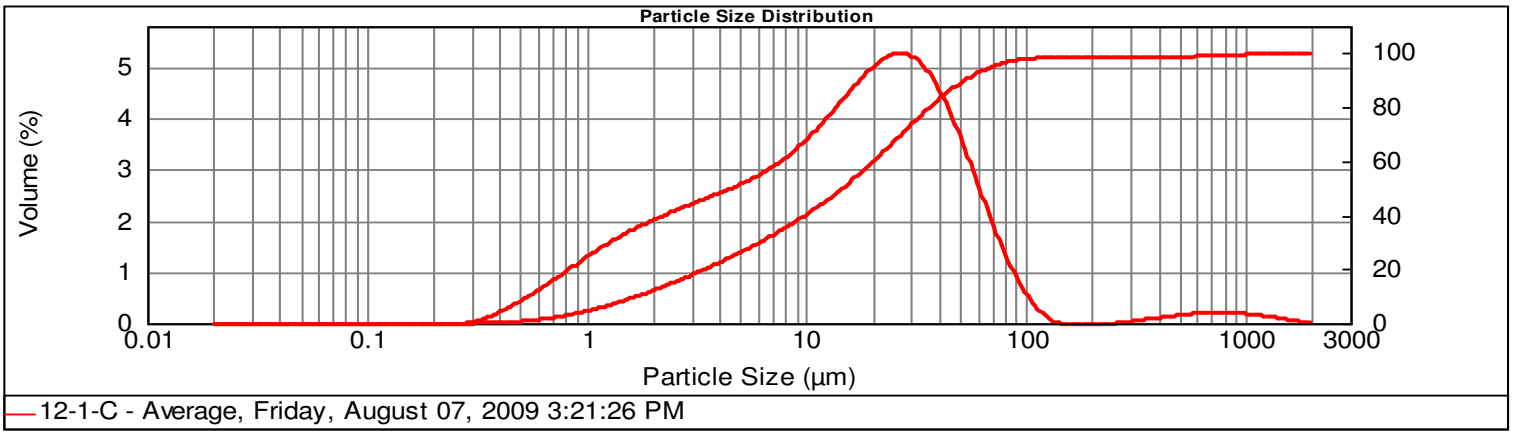
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.41 phi (Silt)

USGS
% Clay (0-2 um) = 12.09
% Fine Silt (2-3.9 um) = 9.89

d (0.1) : 1.696 **um**
d (0.5) : 14.607 **d (0.9) : 52.599**

Wentworth
% Clay (0-3.9 um) = 21.98
% Silt (3.91-31 um) = 52.56
% Coarse Silt (31 - 62.5 um) = 18.82
% Very Fine sand (62.5 - 125 um) = 4.96

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = .88
% Very Coarse sand (1000 - 2000 um) = .45



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.12	100
-0.5	(1414.21)	0.0	(1000.00)	0.33	99.88
0.0	(1000.00)	0.5	(707.10)	0.46	99.55
0.5	(707.10)	1.0	(500.00)	0.42	99.09
1.0	(500.00)	1.5	(353.55)	0.26	98.67
1.5	(353.55)	2.0	(250.00)	0.07	98.41
2.0	(250.00)	2.5	(176.78)	0	98.34
2.5	(176.78)	3.0	(125.00)	0.02	98.34
3.0	(125.00)	3.5	(88.39)	1.08	98.32
3.5	(88.39)	4.0	(62.50)	3.88	97.24
4.0	(62.50)	4.5	(44.19)	7.71	93.36
4.5	(44.19)	5.0	(31.25)	10.83	85.65
5.0	(31.25)	5.5	(22.10)	11.86	74.81
5.5	(22.10)	6.0	(15.63)	11	62.95
6.0	(15.63)	6.5	(11.05)	9.36	51.95
6.5	(11.05)	7.0	(7.81)	7.84	42.59
7.0	(7.81)	7.5	(5.52)	6.74	34.76
7.5	(5.52)	8.0	(3.90)	6	28.01

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.41	22.01
8.5	(2.76)	9.0	(1.95)	4.82	16.6
9.0	(1.95)	9.5	(1.38)	4.15	11.78
9.5	(1.38)	10.0	(0.98)	3.32	7.63
10.0	(0.98)	10.5	(0.69)	2.35	4.3
10.5	(0.69)	11.0	(0.49)	1.37	1.95
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 12-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 3:25:47 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.79

D[4,3] = 31.17um = 5phi
D[v,0.05] = 1.1um = 9.83phi
D[v,0.16] = 2.87um = 8.45phi

D[v,0.5] = 16.36um = 5.93phi
D[v,0.84] = 46.03um = 4.44phi
D[v,0.95] = 76.78um = 3.7phi

Kurtosis = 98.79
Skewness = 9.06
Standard Deviation = 76.51 um = 3.71phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

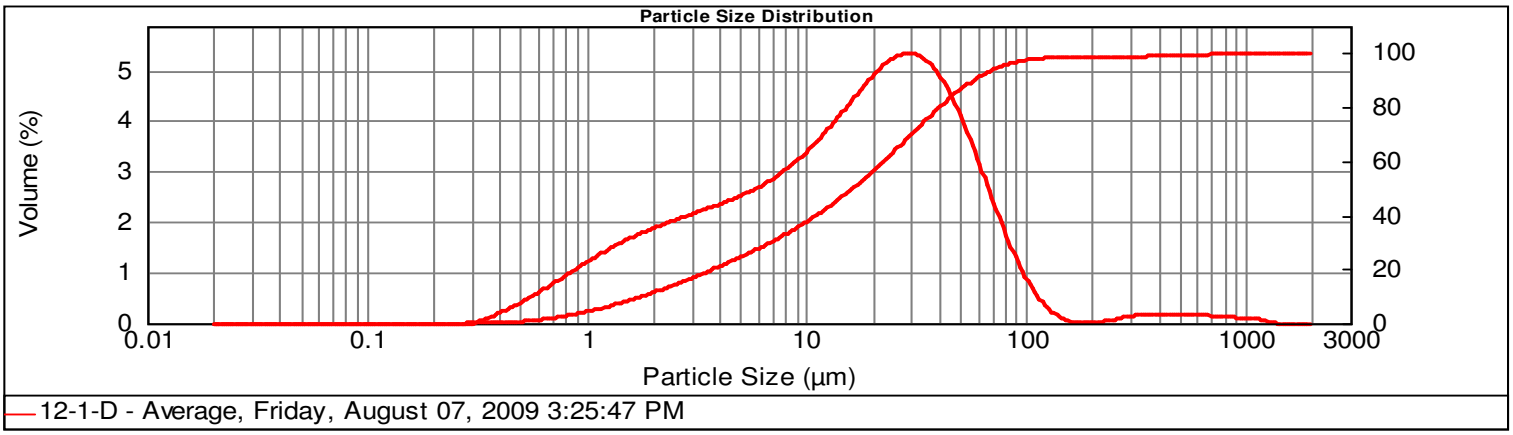
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.27 phi (Silt)

USGS
% Clay (0-2 um) = 11.3
% Fine Silt (2-3.9 um) = 9.19

d (0.1) : 1.794 **um**
d (0.5) : 16.362 **d (0.9) : 57.965**

Wentworth
% Clay (0-3.9 um) = 20.49
% Silt (3.91-31 um) = 50.54
% Coarse Silt (31 - 62.5 um) = 20.57
% Very Fine sand (62.5 - 125 um) = 6.67

% Fine sand (125-250 um) = .3
% Medium sand (250-500 um) = .67
% Coarse sand (500-1000 um) = .64
% Very Coarse sand (1000 - 2000 um) = .12



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.12	100
0.0	(1000.00)	0.5	(707.10)	0.28	99.88
0.5	(707.10)	1.0	(500.00)	0.36	99.6
1.0	(500.00)	1.5	(353.55)	0.38	99.24
1.5	(353.55)	2.0	(250.00)	0.29	98.86
2.0	(250.00)	2.5	(176.78)	0.07	98.57
2.5	(176.78)	3.0	(125.00)	0.23	98.49
3.0	(125.00)	3.5	(88.39)	1.72	98.27
3.5	(88.39)	4.0	(62.50)	4.95	96.55
4.0	(62.50)	4.5	(44.19)	8.81	91.6
4.5	(44.19)	5.0	(31.25)	11.48	82.79
5.0	(31.25)	5.5	(22.10)	11.94	71.31
5.5	(22.10)	6.0	(15.63)	10.69	59.37
6.0	(15.63)	6.5	(11.05)	8.92	48.68
6.5	(11.05)	7.0	(7.81)	7.38	39.76
7.0	(7.81)	7.5	(5.52)	6.29	32.38
7.5	(5.52)	8.0	(3.90)	5.57	26.09
8.0	(3.90)	8.5	(2.76)	5.02	20.51
8.5	(2.76)	9.0	(1.95)	4.48	15.49
9.0	(1.95)	9.5	(1.38)	3.87	11.01
9.5	(1.38)	10.0	(0.98)	3.11	7.14
10.0	(0.98)	10.5	(0.69)	2.2	4.03
10.5	(0.69)	11.0	(0.49)	1.28	1.83
11.0	(0.49)	11.5	(0.35)	0.5	0.55
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 12-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 3:30:09 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.88

D[4,3] = 40.71um = 4.62phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 15.05um = 6.05phi
D[v,0.84] = 44.23um = 4.5phi
D[v,0.95] = 75.08um = 3.74phi

Kurtosis = 68.12
Skewness = 7.85
Standard Deviation = 142.2 um = 2.81phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

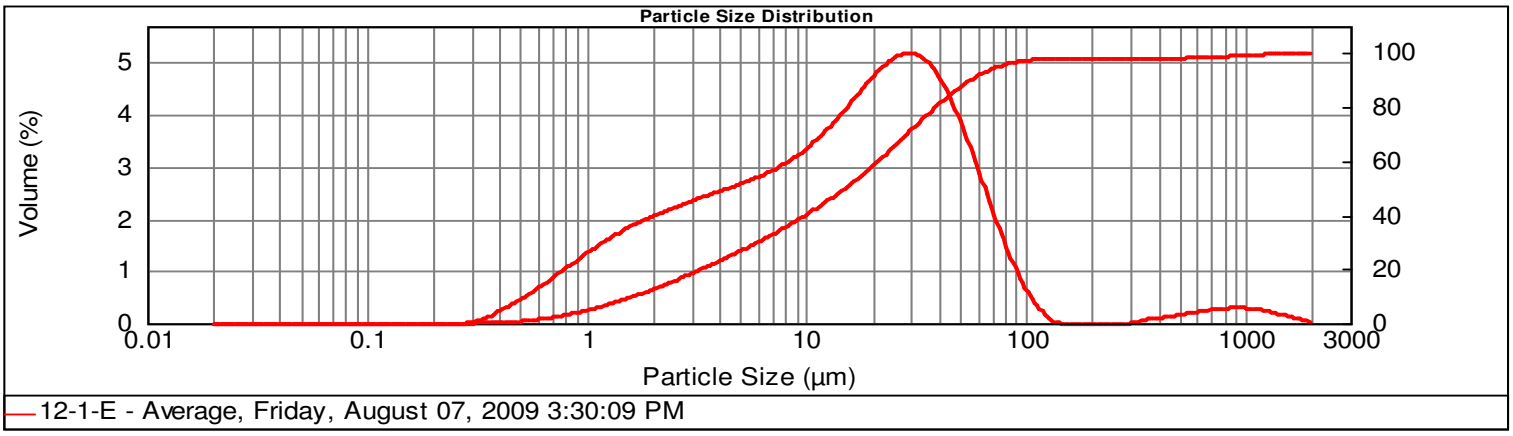
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.52
% Fine Silt (2-3.9 um) = 9.99

d (0.1) : 1.645 **um**
d (0.5) : 15.053 **d (0.9) : 55.921**

Wentworth
% Clay (0-3.9 um) = 22.51
% Silt (3.91-31 um) = 50.13
% Coarse Silt (31 - 62.5 um) = 19.6
% Very Fine sand (62.5 - 125 um) = 5.55

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = 1.12
% Very Coarse sand (1000 - 2000 um) = .79



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.23	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.77
0.0	(1000.00)	0.5	(707.10)	0.64	99.21
0.5	(707.10)	1.0	(500.00)	0.48	98.57
1.0	(500.00)	1.5	(353.55)	0.25	98.09
1.5	(353.55)	2.0	(250.00)	0.03	97.84
2.0	(250.00)	2.5	(176.78)	0	97.81
2.5	(176.78)	3.0	(125.00)	0.03	97.81
3.0	(125.00)	3.5	(88.39)	1.23	97.78
3.5	(88.39)	4.0	(62.50)	4.32	96.56
4.0	(62.50)	4.5	(44.19)	8.26	92.23
4.5	(44.19)	5.0	(31.25)	11.07	83.98
5.0	(31.25)	5.5	(22.10)	11.57	72.91
5.5	(22.10)	6.0	(15.63)	10.33	61.34
6.0	(15.63)	6.5	(11.05)	8.66	51.01
6.5	(11.05)	7.0	(7.81)	7.36	42.35
7.0	(7.81)	7.5	(5.52)	6.51	34.99
7.5	(5.52)	8.0	(3.90)	5.94	28.48
8.0	(3.90)	8.5	(2.76)	5.44	22.54
8.5	(2.76)	9.0	(1.95)	4.9	17.1
9.0	(1.95)	9.5	(1.38)	4.26	12.2
9.5	(1.38)	10.0	(0.98)	3.44	7.94
10.0	(0.98)	10.5	(0.69)	2.45	4.5
10.5	(0.69)	11.0	(0.49)	1.43	2.05
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 12-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 3:34:59 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 10.31

D[4,3] = 23.75um = 5.4phi
D[v,0.05] = 1.09um = 9.85phi
D[v,0.16] = 2.78um = 8.49phi

D[v,0.5] = 16.41um = 5.93phi
D[v,0.84] = 46.04um = 4.44phi
D[v,0.95] = 72.06um = 3.79phi

Kurtosis = 2.24
Skewness = 1.47
Standard Deviation = 23.65 um = 5.4phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

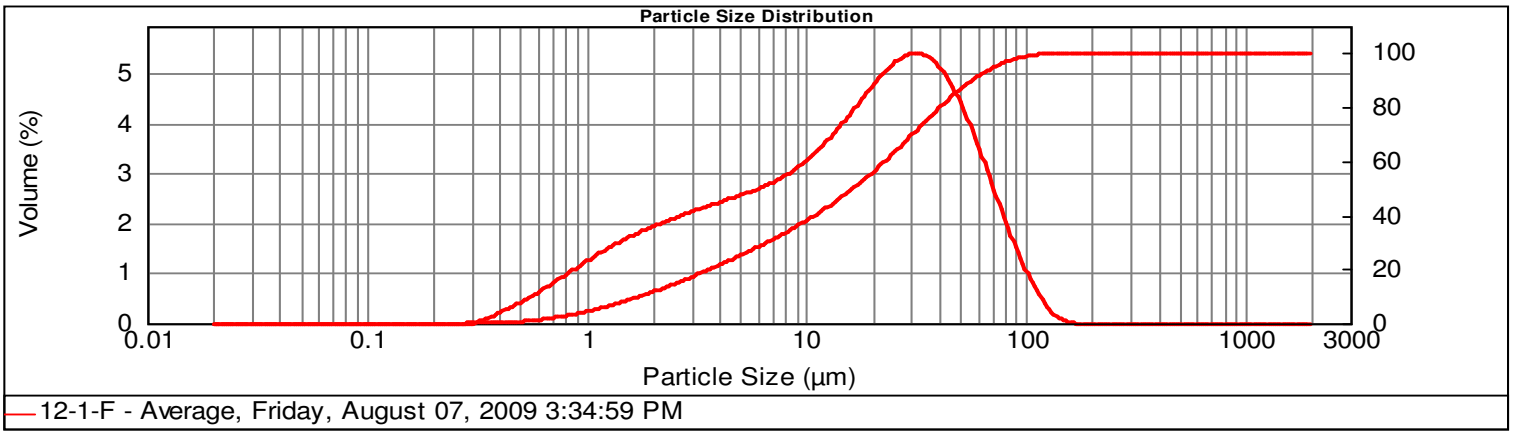
Inclusive Skewness = -0.28 (Coarse Skewed)
Inclusive Mean = 6.29 phi (Silt)

USGS
% Clay (0-2 um) = 11.58
% Fine Silt (2-3.9 um) = 9.49

d (0.1) : 1.758 **um**
d (0.5) : 16.409 **d (0.9) : 56.925**

Wentworth
% Clay (0-3.9 um) = 21.07
% Silt (3.91-31 um) = 49.5
% Coarse Silt (31 - 62.5 um) = 21.64
% Very Fine sand (62.5 - 125 um) = 7.61

% Fine sand (125-250 um) = .18
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.18	100
3.0	(125.00)	3.5	(88.39)	2.03	99.82
3.5	(88.39)	4.0	(62.50)	5.59	97.79
4.0	(62.50)	4.5	(44.19)	9.49	92.21
4.5	(44.19)	5.0	(31.25)	11.86	82.71
5.0	(31.25)	5.5	(22.10)	11.87	70.85
5.5	(22.10)	6.0	(15.63)	10.33	58.99
6.0	(15.63)	6.5	(11.05)	8.52	48.65
6.5	(11.05)	7.0	(7.81)	7.12	40.14
7.0	(7.81)	7.5	(5.52)	6.24	33.01
7.5	(5.52)	8.0	(3.90)	5.67	26.77

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.18	21.1
8.5	(2.76)	9.0	(1.95)	4.63	15.92
9.0	(1.95)	9.5	(1.38)	3.99	11.29
9.5	(1.38)	10.0	(0.98)	3.19	7.3
10.0	(0.98)	10.5	(0.69)	2.25	4.11
10.5	(0.69)	11.0	(0.49)	1.31	1.86
11.0	(0.49)	11.5	(0.35)	0.51	0.55
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 13-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 2:43:08 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.33

D[4,3] = 48.35um = 4.37phi
D[v,0.05] = 1.13um = 9.8phi
D[v,0.16] = 2.95um = 8.4phi

D[v,0.5] = 17.21um = 5.86phi
D[v,0.84] = 54.88um = 4.19phi
D[v,0.95] = 114.6um = 3.13phi

Kurtosis = 56.66
Skewness = 6.98
Standard Deviation = 142.59 um = 2.81phi

Inclusive SD (Sorting Coeff.) = 2.06 phi (Very Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

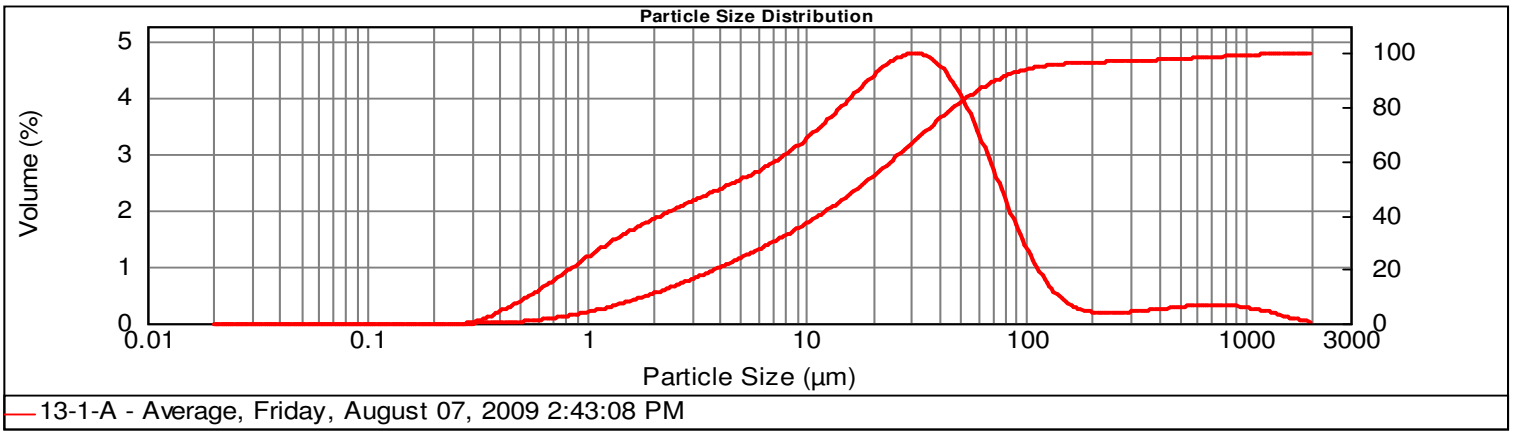
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.15 phi (Silt)

USGS
% Clay (0-2 um) = 10.92
% Fine Silt (2-3.9 um) = 9.15

d (0.1) : 1.849 **um**
d (0.5) : 17.206 **d (0.9) : 73.156**

Wentworth
% Clay (0-3.9 um) = 20.07
% Silt (3.91-31 um) = 47.35
% Coarse Silt (31 - 62.5 um) = 19.56
% Very Fine sand (62.5 - 125 um) = 8.48

% Fine sand (125-250 um) = 1.4
% Medium sand (250-500 um) = 1.04
% Coarse sand (500-1000 um) = 1.41
% Very Coarse sand (1000 - 2000 um) = .69



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.18	100
-0.5	(1414.21)	0.0	(1000.00)	0.51	99.82
0.0	(1000.00)	0.5	(707.10)	0.71	99.31
0.5	(707.10)	1.0	(500.00)	0.71	98.6
1.0	(500.00)	1.5	(353.55)	0.58	97.89
1.5	(353.55)	2.0	(250.00)	0.45	97.31
2.0	(250.00)	2.5	(176.78)	0.44	96.86
2.5	(176.78)	3.0	(125.00)	0.96	96.42
3.0	(125.00)	3.5	(88.39)	2.74	95.46
3.5	(88.39)	4.0	(62.50)	5.74	92.72
4.0	(62.50)	4.5	(44.19)	8.78	86.98
4.5	(44.19)	5.0	(31.25)	10.53	78.2
5.0	(31.25)	5.5	(22.10)	10.61	67.67
5.5	(22.10)	6.0	(15.63)	9.61	57.06
6.0	(15.63)	6.5	(11.05)	8.31	47.46
6.5	(11.05)	7.0	(7.81)	7.16	39.14
7.0	(7.81)	7.5	(5.52)	6.28	31.98
7.5	(5.52)	8.0	(3.90)	5.61	25.7
8.0	(3.90)	8.5	(2.76)	5.03	20.09
8.5	(2.76)	9.0	(1.95)	4.43	15.07
9.0	(1.95)	9.5	(1.38)	3.77	10.64
9.5	(1.38)	10.0	(0.98)	2.99	6.87
10.0	(0.98)	10.5	(0.69)	2.11	3.88
10.5	(0.69)	11.0	(0.49)	1.23	1.77
11.0	(0.49)	11.5	(0.35)	0.49	0.54
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 13-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 2:38:28 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.23

D[4,3] = 38.88um = 4.68phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.78um = 8.49phi

D[v,0.5] = 16.13um = 5.95phi
D[v,0.84] = 46.84um = 4.42phi
D[v,0.95] = 79.1um = 3.66phi

Kurtosis = 85.05
Skewness = 8.69
Standard Deviation = 129.35 um = 2.95phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

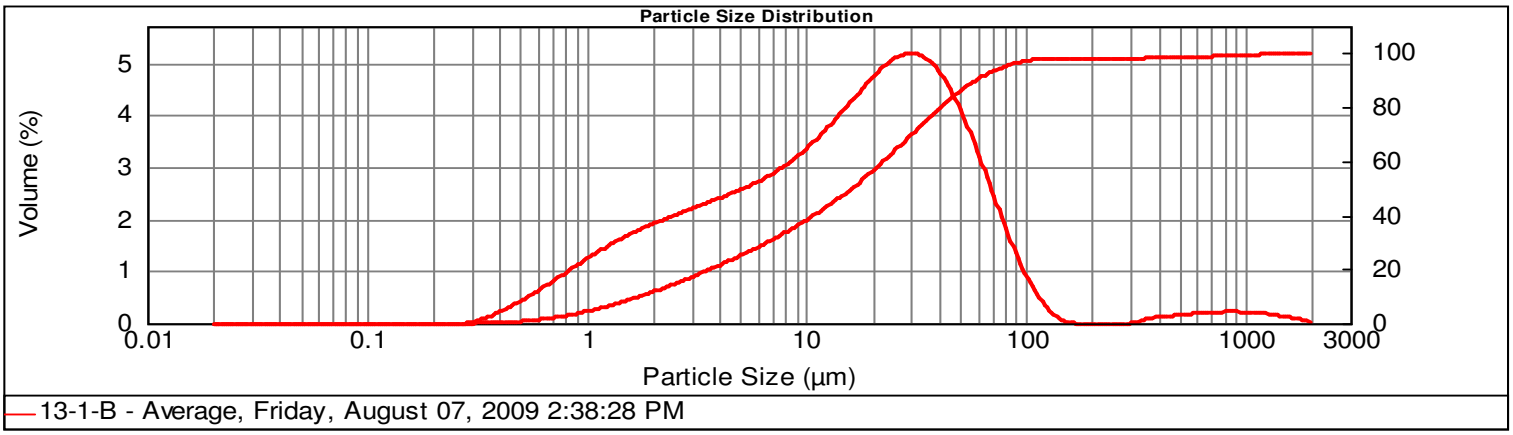
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.29 phi (Silt)

USGS
% Clay (0-2 um) = 11.61
% Fine Silt (2-3.9 um) = 9.38

d (0.1) : 1.752 **um**
d (0.5) : 16.128 **d (0.9) : 59.258**

Wentworth
% Clay (0-3.9 um) = 20.98
% Silt (3.91-31 um) = 49.77
% Coarse Silt (31 - 62.5 um) = 20.38
% Very Fine sand (62.5 - 125 um) = 6.86

% Fine sand (125-250 um) = .16
% Medium sand (250-500 um) = .32
% Coarse sand (500-1000 um) = .91
% Very Coarse sand (1000 - 2000 um) = .63



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.42	99.79
0.0	(1000.00)	0.5	(707.10)	0.49	99.37
0.5	(707.10)	1.0	(500.00)	0.42	98.88
1.0	(500.00)	1.5	(353.55)	0.28	98.46
1.5	(353.55)	2.0	(250.00)	0.04	98.18
2.0	(250.00)	2.5	(176.78)	0	98.14
2.5	(176.78)	3.0	(125.00)	0.16	98.14
3.0	(125.00)	3.5	(88.39)	1.77	97.98
3.5	(88.39)	4.0	(62.50)	5.08	96.21
4.0	(62.50)	4.5	(44.19)	8.84	91.13
4.5	(44.19)	5.0	(31.25)	11.27	82.29
5.0	(31.25)	5.5	(22.10)	11.56	71.02
5.5	(22.10)	6.0	(15.63)	10.35	59.47
6.0	(15.63)	6.5	(11.05)	8.73	49.12
6.5	(11.05)	7.0	(7.81)	7.35	40.39
7.0	(7.81)	7.5	(5.52)	6.36	33.04
7.5	(5.52)	8.0	(3.90)	5.67	26.68
8.0	(3.90)	8.5	(2.76)	5.12	21.01
8.5	(2.76)	9.0	(1.95)	4.57	15.89
9.0	(1.95)	9.5	(1.38)	3.96	11.31
9.5	(1.38)	10.0	(0.98)	3.18	7.36
10.0	(0.98)	10.5	(0.69)	2.26	4.18
10.5	(0.69)	11.0	(0.49)	1.33	1.91
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 13-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 2:51:02 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.29

D[4,3] = 37.97um = 4.72phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.69um = 8.54phi

D[v,0.5] = 15.03um = 6.06phi
D[v,0.84] = 42.17um = 4.57phi
D[v,0.95] = 69.83um = 3.84phi

Kurtosis = 82.07
Skewness = 8.66
Standard Deviation = 139.01 um = 2.85phi

Inclusive SD (Sorting Coeff.) = 1.91 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

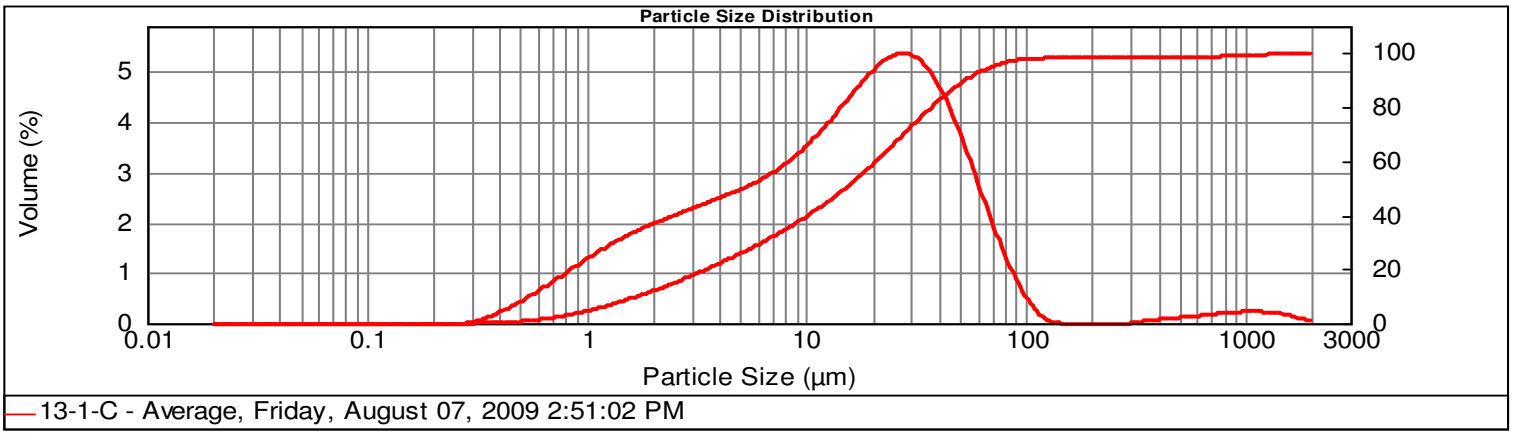
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 11.93
% Fine Silt (2-3.9 um) = 9.71

d (0.1) : 1.713 **um**
d (0.5) : 15.030 **d (0.9) : 52.899**

Wentworth
% Clay (0-3.9 um) = 21.64
% Silt (3.91-31 um) = 52.28
% Coarse Silt (31 - 62.5 um) = 19.4
% Very Fine sand (62.5 - 125 um) = 4.87

% Fine sand (125-250 um) = .01
% Medium sand (250-500 um) = .21
% Coarse sand (500-1000 um) = .8
% Very Coarse sand (1000 - 2000 um) = .79



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.29	100
-0.5	(1414.21)	0.0	(1000.00)	0.5	99.71
0.0	(1000.00)	0.5	(707.10)	0.47	99.21
0.5	(707.10)	1.0	(500.00)	0.32	98.74
1.0	(500.00)	1.5	(353.55)	0.19	98.42
1.5	(353.55)	2.0	(250.00)	0.02	98.23
2.0	(250.00)	2.5	(176.78)	0	98.21
2.5	(176.78)	3.0	(125.00)	0.01	98.21
3.0	(125.00)	3.5	(88.39)	0.96	98.19
3.5	(88.39)	4.0	(62.50)	3.91	97.24
4.0	(62.50)	4.5	(44.19)	7.96	93.33
4.5	(44.19)	5.0	(31.25)	11.16	85.36
5.0	(31.25)	5.5	(22.10)	12.07	74.2
5.5	(22.10)	6.0	(15.63)	11.01	62.13
6.0	(15.63)	6.5	(11.05)	9.25	51.12
6.5	(11.05)	7.0	(7.81)	7.7	41.87
7.0	(7.81)	7.5	(5.52)	6.62	34.17
7.5	(5.52)	8.0	(3.90)	5.89	27.55

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.3	21.67
8.5	(2.76)	9.0	(1.95)	4.73	16.36
9.0	(1.95)	9.5	(1.38)	4.09	11.63
9.5	(1.38)	10.0	(0.98)	3.28	7.54
10.0	(0.98)	10.5	(0.69)	2.32	4.26
10.5	(0.69)	11.0	(0.49)	1.35	1.94
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 13-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 2:55:31 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.10

D[4,3] = 27.02um = 5.21phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.76um = 8.5phi

D[v,0.5] = 15.45um = 6.02phi
D[v,0.84] = 43.69um = 4.52phi
D[v,0.95] = 70.15um = 3.83phi

Kurtosis = 137
Skewness = 10.61
Standard Deviation = 61.81 um = 4.02phi

Inclusive SD (Sorting Coeff.) = 1.91 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

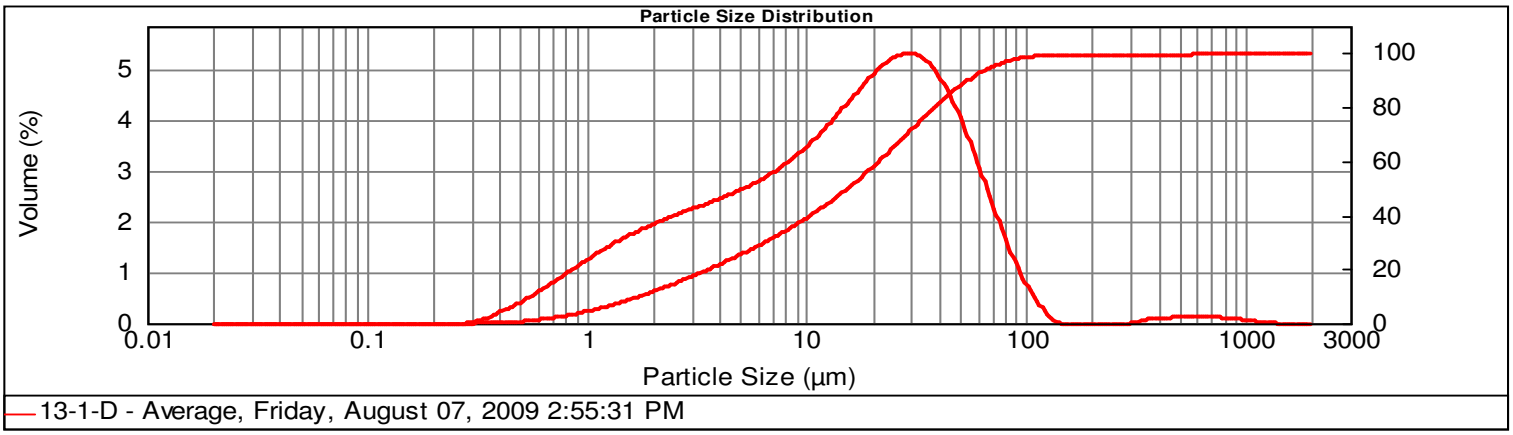
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.35 phi (Silt)

USGS
% Clay (0-2 um) = 11.67
% Fine Silt (2-3.9 um) = 9.58

d (0.1) : 1.747 **um**
d (0.5) : 15.454 **d (0.9) : 54.446**

Wentworth
% Clay (0-3.9 um) = 21.25
% Silt (3.91-31 um) = 51.43
% Coarse Silt (31 - 62.5 um) = 20.32
% Very Fine sand (62.5 - 125 um) = 6.16

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = .49
% Very Coarse sand (1000 - 2000 um) = .05



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.05	100
0.0	(1000.00)	0.5	(707.10)	0.22	99.95
0.5	(707.10)	1.0	(500.00)	0.28	99.73
1.0	(500.00)	1.5	(353.55)	0.23	99.46
1.5	(353.55)	2.0	(250.00)	0.03	99.23
2.0	(250.00)	2.5	(176.78)	0	99.19
2.5	(176.78)	3.0	(125.00)	0.04	99.19
3.0	(125.00)	3.5	(88.39)	1.46	99.15
3.5	(88.39)	4.0	(62.50)	4.7	97.69
4.0	(62.50)	4.5	(44.19)	8.64	92.99
4.5	(44.19)	5.0	(31.25)	11.4	84.35
5.0	(31.25)	5.5	(22.10)	11.9	72.95
5.5	(22.10)	6.0	(15.63)	10.74	61.05
6.0	(15.63)	6.5	(11.05)	9.06	50.31
6.5	(11.05)	7.0	(7.81)	7.61	41.25
7.0	(7.81)	7.5	(5.52)	6.55	33.64
7.5	(5.52)	8.0	(3.90)	5.82	27.09
8.0	(3.90)	8.5	(2.76)	5.24	21.27
8.5	(2.76)	9.0	(1.95)	4.67	16.04
9.0	(1.95)	9.5	(1.38)	4.02	11.37
9.5	(1.38)	10.0	(0.98)	3.21	7.35
10.0	(0.98)	10.5	(0.69)	2.26	4.14
10.5	(0.69)	11.0	(0.49)	1.32	1.88
11.0	(0.49)	11.5	(0.35)	0.52	0.56
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 13-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 2:59:58 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.40

D[4,3] = 21.84um = 5.52phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.61um = 8.58phi

D[v,0.5] = 14.21um = 6.14phi
D[v,0.84] = 38.46um = 4.7phi
D[v,0.95] = 59.8um = 4.06phi

Kurtosis = 342.11
Skewness = 16.22
Standard Deviation = 43.79 um = 4.51phi

Inclusive SD (Sorting Coeff.) = 1.85 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

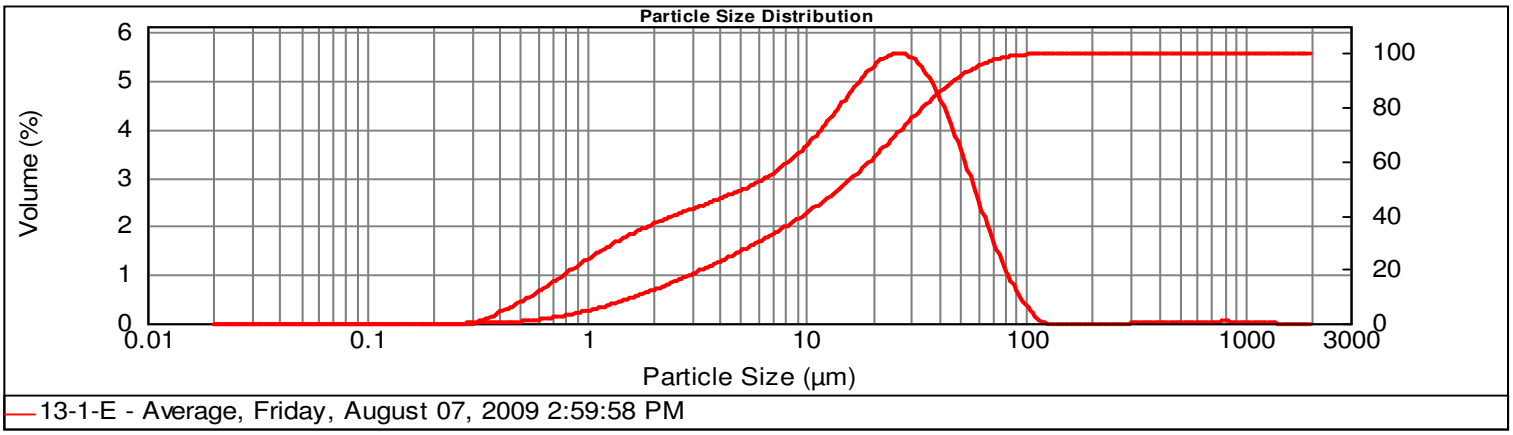
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 12.25
% Fine Silt (2-3.9 um) = 10.02

d (0.1) : 1.679 **um**
d (0.5) : 14.214 **d (0.9) : 47.342**

Wentworth
% Clay (0-3.9 um) = 22.26
% Silt (3.91-31 um) = 54.42
% Coarse Silt (31 - 62.5 um) = 19.04
% Very Fine sand (62.5 - 125 um) = 4.01

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .06
% Coarse sand (500-1000 um) = .16
% Very Coarse sand (1000 - 2000 um) = .05



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.05	100
0.0	(1000.00)	0.5	(707.10)	0.09	99.95
0.5	(707.10)	1.0	(500.00)	0.08	99.86
1.0	(500.00)	1.5	(353.55)	0.05	99.79
1.5	(353.55)	2.0	(250.00)	0.01	99.73
2.0	(250.00)	2.5	(176.78)	0	99.73
2.5	(176.78)	3.0	(125.00)	0	99.73
3.0	(125.00)	3.5	(88.39)	0.62	99.73
3.5	(88.39)	4.0	(62.50)	3.39	99.11
4.0	(62.50)	4.5	(44.19)	7.56	95.72
4.5	(44.19)	5.0	(31.25)	11.2	88.16
5.0	(31.25)	5.5	(22.10)	12.53	76.97
5.5	(22.10)	6.0	(15.63)	11.59	64.44
6.0	(15.63)	6.5	(11.05)	9.7	52.85
6.5	(11.05)	7.0	(7.81)	7.98	43.14
7.0	(7.81)	7.5	(5.52)	6.81	35.16
7.5	(5.52)	8.0	(3.90)	6.06	28.35

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.47	22.29
8.5	(2.76)	9.0	(1.95)	4.89	16.82
9.0	(1.95)	9.5	(1.38)	4.21	11.93
9.5	(1.38)	10.0	(0.98)	3.37	7.72
10.0	(0.98)	10.5	(0.69)	2.38	4.35
10.5	(0.69)	11.0	(0.49)	1.38	1.97
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 13-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 3:07:39 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.80

D[4,3] = 30.99um = 5.01phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.66um = 8.55phi

D[v,0.5] = 15.51um = 6.01phi
D[v,0.84] = 44.11um = 4.5phi
D[v,0.95] = 71.85um = 3.8phi

Kurtosis = 113.11
Skewness = 9.98
Standard Deviation = 90.47 um = 3.47phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

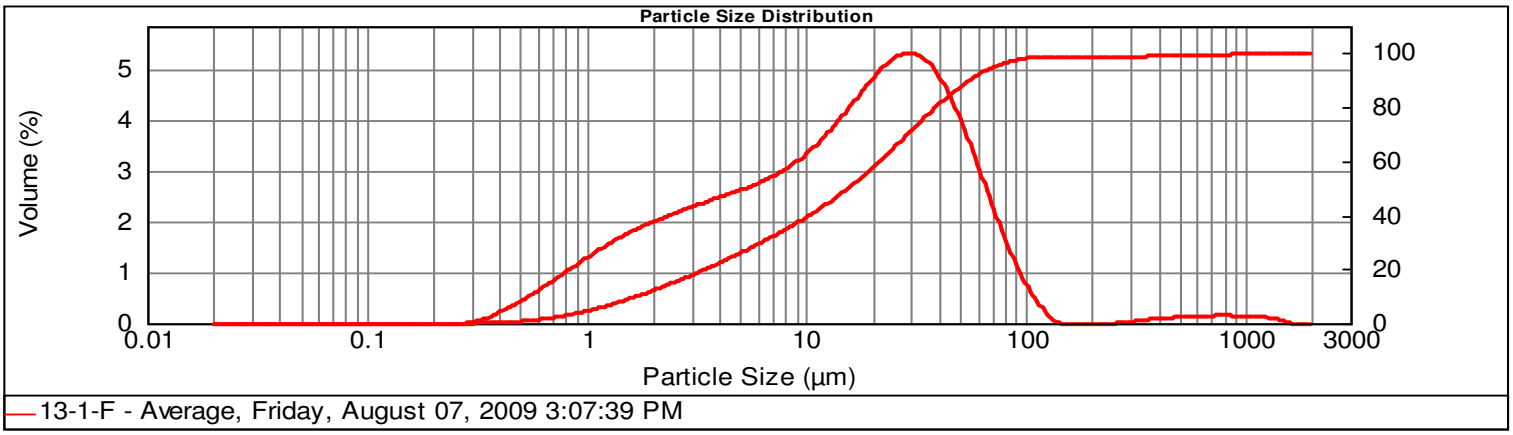
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.36 phi (Silt)

USGS
% Clay (0-2 um) = 12.06
% Fine Silt (2-3.9 um) = 9.77

d (0.1) : 1.698 **um**
d (0.5) : 15.507 **d (0.9) : 55.161**

Wentworth
% Clay (0-3.9 um) = 21.84
% Silt (3.91-31 um) = 50.52
% Coarse Silt (31 - 62.5 um) = 20.3
% Very Fine sand (62.5 - 125 um) = 6.09

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = .64
% Very Coarse sand (1000 - 2000 um) = .29



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.02	100
-0.5	(1414.21)	0.0	(1000.00)	0.27	99.98
0.0	(1000.00)	0.5	(707.10)	0.33	99.71
0.5	(707.10)	1.0	(500.00)	0.31	99.38
1.0	(500.00)	1.5	(353.55)	0.22	99.07
1.5	(353.55)	2.0	(250.00)	0.06	98.86
2.0	(250.00)	2.5	(176.78)	0	98.8
2.5	(176.78)	3.0	(125.00)	0.04	98.8
3.0	(125.00)	3.5	(88.39)	1.45	98.75
3.5	(88.39)	4.0	(62.50)	4.64	97.3
4.0	(62.50)	4.5	(44.19)	8.6	92.66
4.5	(44.19)	5.0	(31.25)	11.42	84.06
5.0	(31.25)	5.5	(22.10)	11.88	72.64
5.5	(22.10)	6.0	(15.63)	10.55	60.76
6.0	(15.63)	6.5	(11.05)	8.75	50.21
6.5	(11.05)	7.0	(7.81)	7.33	41.46
7.0	(7.81)	7.5	(5.52)	6.43	34.13
7.5	(5.52)	8.0	(3.90)	5.84	27.7

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.33	21.86
8.5	(2.76)	9.0	(1.95)	4.78	16.54
9.0	(1.95)	9.5	(1.38)	4.14	11.76
9.5	(1.38)	10.0	(0.98)	3.32	7.62
10.0	(0.98)	10.5	(0.69)	2.35	4.3
10.5	(0.69)	11.0	(0.49)	1.37	1.95
11.0	(0.49)	11.5	(0.35)	0.54	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 14-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 11:57:36 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.88

D[4,3] = 61.28um = 4.03phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.76um = 8.5phi

D[v,0.5] = 15.12um = 6.05phi
D[v,0.84] = 48.59um = 4.36phi
D[v,0.95] = 205.94um = 2.28phi

Kurtosis = 34.35
Skewness = 5.63
Standard Deviation = 197.84 um = 2.34phi

Inclusive SD (Sorting Coeff.) = 2.18 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.1 phi (Mesokurtic)

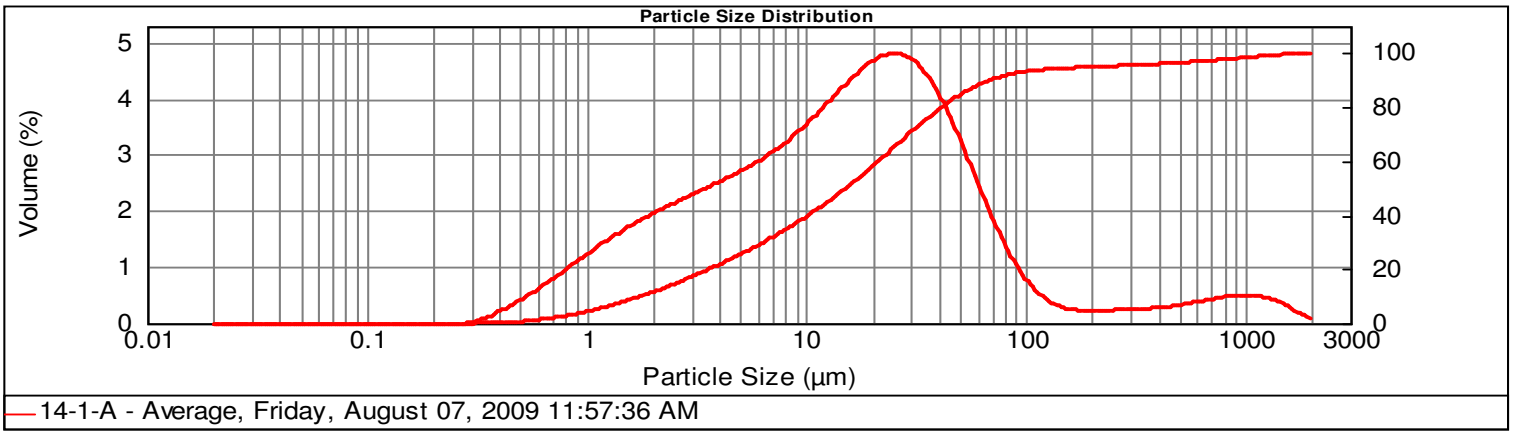
Inclusive Skewness = -0.09 (Near Symmetrical)
Inclusive Mean = 6.3 phi (Silt)

USGS
% Clay (0-2 um) = 11.58
% Fine Silt (2-3.9 um) = 9.73

d (0.1) : 1.761 **um**
d (0.5) : 15.117 **d (0.9) : 68.377**

Wentworth
% Clay (0-3.9 um) = 21.3
% Silt (3.91-31 um) = 50.55
% Coarse Silt (31 - 62.5 um) = 16.87
% Very Fine sand (62.5 - 125 um) = 5.4

% Fine sand (125-250 um) = 1.17
% Medium sand (250-500 um) = 1.21
% Coarse sand (500-1000 um) = 1.93
% Very Coarse sand (1000 - 2000 um) = 1.57



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.53	100
-0.5	(1414.21)	0.0	(1000.00)	1.04	99.47
0.0	(1000.00)	0.5	(707.10)	1.07	98.43
0.5	(707.10)	1.0	(500.00)	0.85	97.35
1.0	(500.00)	1.5	(353.55)	0.65	96.5
1.5	(353.55)	2.0	(250.00)	0.56	95.85
2.0	(250.00)	2.5	(176.78)	0.51	95.29
2.5	(176.78)	3.0	(125.00)	0.65	94.78
3.0	(125.00)	3.5	(88.39)	1.58	94.12
3.5	(88.39)	4.0	(62.50)	3.81	92.54
4.0	(62.50)	4.5	(44.19)	6.95	88.73
4.5	(44.19)	5.0	(31.25)	9.68	81.78
5.0	(31.25)	5.5	(22.10)	10.82	72.1
5.5	(22.10)	6.0	(15.63)	10.35	61.28
6.0	(15.63)	6.5	(11.05)	9.09	50.93
6.5	(11.05)	7.0	(7.81)	7.78	41.84
7.0	(7.81)	7.5	(5.52)	6.75	34.06
7.5	(5.52)	8.0	(3.90)	5.98	27.31

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.35	21.33
8.5	(2.76)	9.0	(1.95)	4.71	15.99
9.0	(1.95)	9.5	(1.38)	4	11.28
9.5	(1.38)	10.0	(0.98)	3.17	7.27
10.0	(0.98)	10.5	(0.69)	2.23	4.1
10.5	(0.69)	11.0	(0.49)	1.3	1.87
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 14-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 12:01:53 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.35

D[4,3] = 52.96um = 4.24phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.73um = 8.52phi

D[v,0.5] = 14.83um = 6.08phi
D[v,0.84] = 43.99um = 4.51phi
D[v,0.95] = 94.96um = 3.4phi

Kurtosis = 33.94
Skewness = 5.57
Standard Deviation = 168.46 um = 2.57phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .96 phi (Mesokurtic)

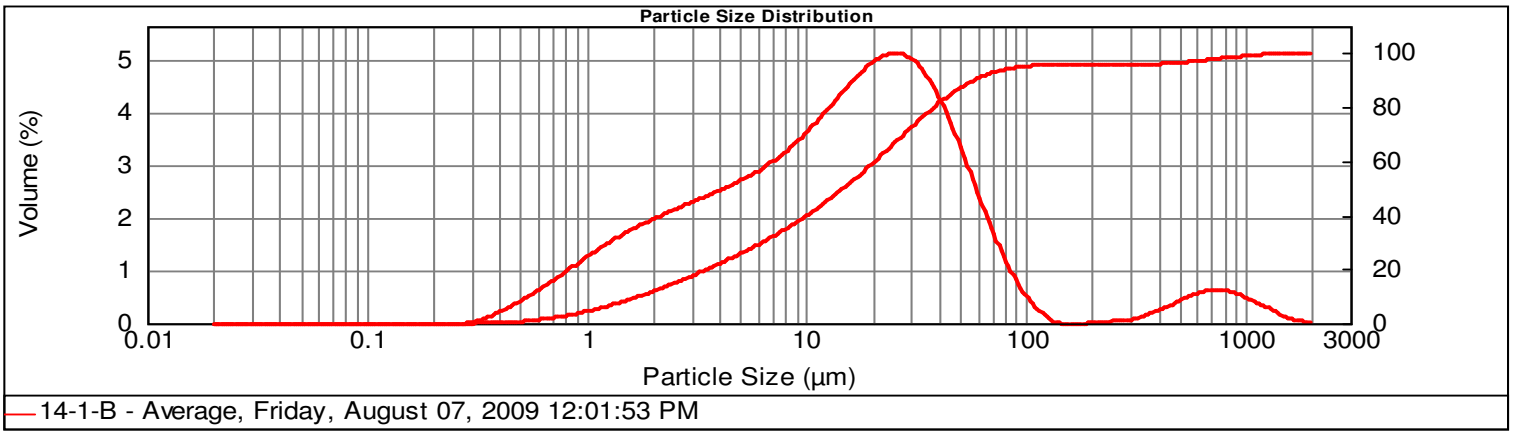
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 11.76
% Fine Silt (2-3.9 um) = 9.73

d (0.1) : 1.737 **um**
d (0.5) : 14.831 **d (0.9) : 58.080**

Wentworth
% Clay (0-3.9 um) = 21.49
% Silt (3.91-31 um) = 52.15
% Coarse Silt (31 - 62.5 um) = 17.54
% Very Fine sand (62.5 - 125 um) = 4.44

% Fine sand (125-250 um) = .06
% Medium sand (250-500 um) = .8
% Coarse sand (500-1000 um) = 2.58
% Very Coarse sand (1000 - 2000 um) = .94



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.77	99.83
0.0	(1000.00)	0.5	(707.10)	1.34	99.06
0.5	(707.10)	1.0	(500.00)	1.25	97.73
1.0	(500.00)	1.5	(353.55)	0.63	96.48
1.5	(353.55)	2.0	(250.00)	0.17	95.85
2.0	(250.00)	2.5	(176.78)	0.03	95.68
2.5	(176.78)	3.0	(125.00)	0.03	95.65
3.0	(125.00)	3.5	(88.39)	0.97	95.62
3.5	(88.39)	4.0	(62.50)	3.47	94.65
4.0	(62.50)	4.5	(44.19)	7.06	91.18
4.5	(44.19)	5.0	(31.25)	10.21	84.12
5.0	(31.25)	5.5	(22.10)	11.49	73.9
5.5	(22.10)	6.0	(15.63)	10.89	62.41
6.0	(15.63)	6.5	(11.05)	9.39	51.52
6.5	(11.05)	7.0	(7.81)	7.89	42.12
7.0	(7.81)	7.5	(5.52)	6.75	34.23
7.5	(5.52)	8.0	(3.90)	5.96	27.48

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.33	21.52
8.5	(2.76)	9.0	(1.95)	4.73	16.18
9.0	(1.95)	9.5	(1.38)	4.05	11.46
9.5	(1.38)	10.0	(0.98)	3.23	7.4
10.0	(0.98)	10.5	(0.69)	2.28	4.17
10.5	(0.69)	11.0	(0.49)	1.32	1.9
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 14-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Friday, August 07, 2009 12:08:19 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.96

D[4,3] = 41.91um = 4.58phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 14.91um = 6.07phi
D[v,0.84] = 44.46um = 4.49phi
D[v,0.95] = 76.99um = 3.7phi

Kurtosis = 67.15
Skewness = 7.79
Standard Deviation = 147.46 um = 2.76phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

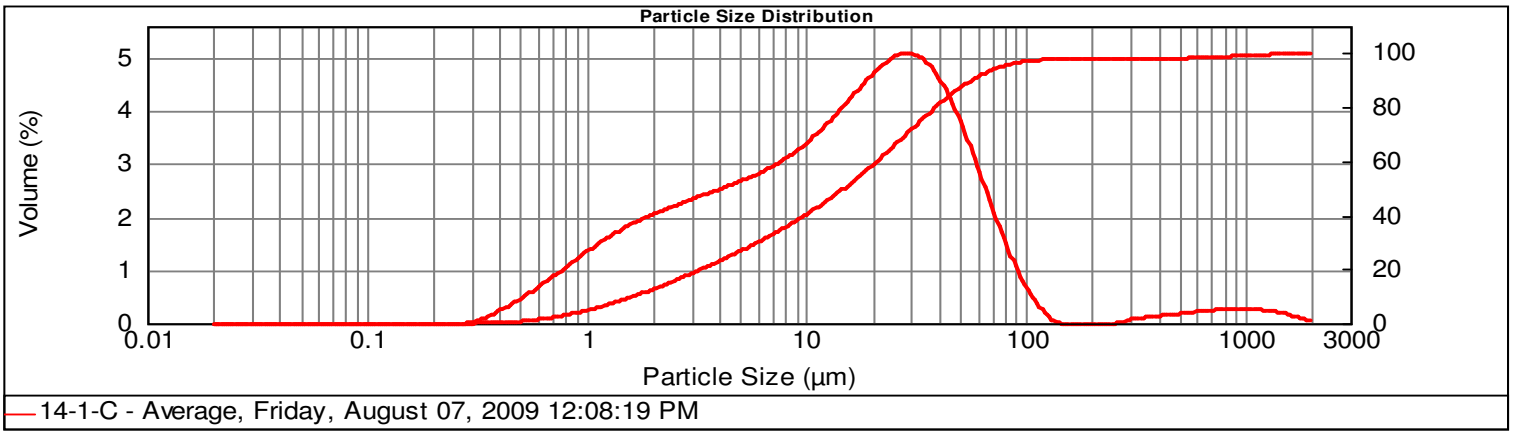
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.57
% Fine Silt (2-3.9 um) = 9.97

d (0.1) : 1.639 **um**
d (0.5) : 14.906 **d (0.9) : 56.580**

Wentworth
% Clay (0-3.9 um) = 22.54
% Silt (3.91-31 um) = 50.18
% Coarse Silt (31 - 62.5 um) = 19.23
% Very Fine sand (62.5 - 125 um) = 5.63

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .45
% Coarse sand (500-1000 um) = 1.08
% Very Coarse sand (1000 - 2000 um) = .85



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.29	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.71
0.0	(1000.00)	0.5	(707.10)	0.6	99.15
0.5	(707.10)	1.0	(500.00)	0.48	98.55
1.0	(500.00)	1.5	(353.55)	0.32	98.07
1.5	(353.55)	2.0	(250.00)	0.13	97.74
2.0	(250.00)	2.5	(176.78)	0	97.62
2.5	(176.78)	3.0	(125.00)	0.04	97.62
3.0	(125.00)	3.5	(88.39)	1.3	97.58
3.5	(88.39)	4.0	(62.50)	4.32	96.28
4.0	(62.50)	4.5	(44.19)	8.12	91.95
4.5	(44.19)	5.0	(31.25)	10.85	83.83
5.0	(31.25)	5.5	(22.10)	11.4	72.99
5.5	(22.10)	6.0	(15.63)	10.31	61.59
6.0	(15.63)	6.5	(11.05)	8.76	51.28
6.5	(11.05)	7.0	(7.81)	7.46	42.52
7.0	(7.81)	7.5	(5.52)	6.56	35.06
7.5	(5.52)	8.0	(3.90)	5.94	28.5
8.0	(3.90)	8.5	(2.76)	5.42	22.57
8.5	(2.76)	9.0	(1.95)	4.89	17.15
9.0	(1.95)	9.5	(1.38)	4.27	12.25
9.5	(1.38)	10.0	(0.98)	3.45	7.98
10.0	(0.98)	10.5	(0.69)	2.46	4.53
10.5	(0.69)	11.0	(0.49)	1.44	2.07
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 14-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 1:54:11 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.51

D[4,3] = 51.04um = 4.29phi
D[v,0.05] = 1.11um = 9.82phi
D[v,0.16] = 2.92um = 8.42phi

D[v,0.5] = 18.76um = 5.74phi
D[v,0.84] = 56.02um = 4.16phi
D[v,0.95] = 101.86um = 3.3phi

Kurtosis = 47.25
Skewness = 6.46
Standard Deviation = 150.92 um = 2.73phi

Inclusive SD (Sorting Coeff.) = 2.05 phi (Very Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

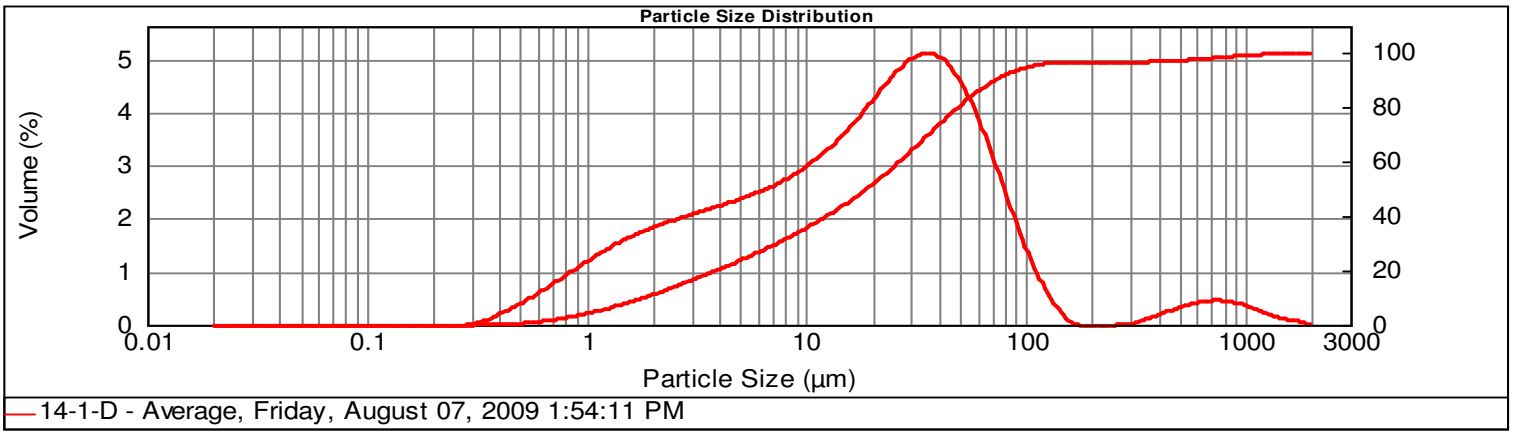
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.1 phi (Silt)

USGS
% Clay (0-2 um) = 11.16
% Fine Silt (2-3.9 um) = 8.89

d (0.1) : 1.812 **um**
d (0.5) : 18.762 **d (0.9) : 71.947**

Wentworth
% Clay (0-3.9 um) = 20.05
% Silt (3.91-31 um) = 45.08
% Coarse Silt (31 - 62.5 um) = 21.73
% Very Fine sand (62.5 - 125 um) = 9.43

% Fine sand (125-250 um) = .48
% Medium sand (250-500 um) = .57
% Coarse sand (500-1000 um) = 1.91
% Very Coarse sand (1000 - 2000 um) = .75



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.18	100
-0.5	(1414.21)	0.0	(1000.00)	0.57	99.82
0.0	(1000.00)	0.5	(707.10)	0.98	99.25
0.5	(707.10)	1.0	(500.00)	0.93	98.27
1.0	(500.00)	1.5	(353.55)	0.5	97.33
1.5	(353.55)	2.0	(250.00)	0.07	96.83
2.0	(250.00)	2.5	(176.78)	0	96.76
2.5	(176.78)	3.0	(125.00)	0.48	96.76
3.0	(125.00)	3.5	(88.39)	2.86	96.28
3.5	(88.39)	4.0	(62.50)	6.57	93.43
4.0	(62.50)	4.5	(44.19)	9.99	86.85
4.5	(44.19)	5.0	(31.25)	11.47	76.87
5.0	(31.25)	5.5	(22.10)	10.83	65.39
5.5	(22.10)	6.0	(15.63)	9.2	54.56
6.0	(15.63)	6.5	(11.05)	7.66	45.36
6.5	(11.05)	7.0	(7.81)	6.55	37.7
7.0	(7.81)	7.5	(5.52)	5.8	31.15
7.5	(5.52)	8.0	(3.90)	5.27	25.35

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.83	20.08
8.5	(2.76)	9.0	(1.95)	4.37	15.25
9.0	(1.95)	9.5	(1.38)	3.81	10.88
9.5	(1.38)	10.0	(0.98)	3.07	7.07
10.0	(0.98)	10.5	(0.69)	2.18	4
10.5	(0.69)	11.0	(0.49)	1.27	1.82
11.0	(0.49)	11.5	(0.35)	0.5	0.55
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 14-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 2:33:03 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.58

D[4,3] = 24.31um = 5.36phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 15.04um = 6.05phi
D[v,0.84] = 46.19um = 4.44phi
D[v,0.95] = 75.34um = 3.73phi

Kurtosis = 92.62
Skewness = 6.62
Standard Deviation = 31.66 um = 4.98phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .86 phi (Platykurtic)

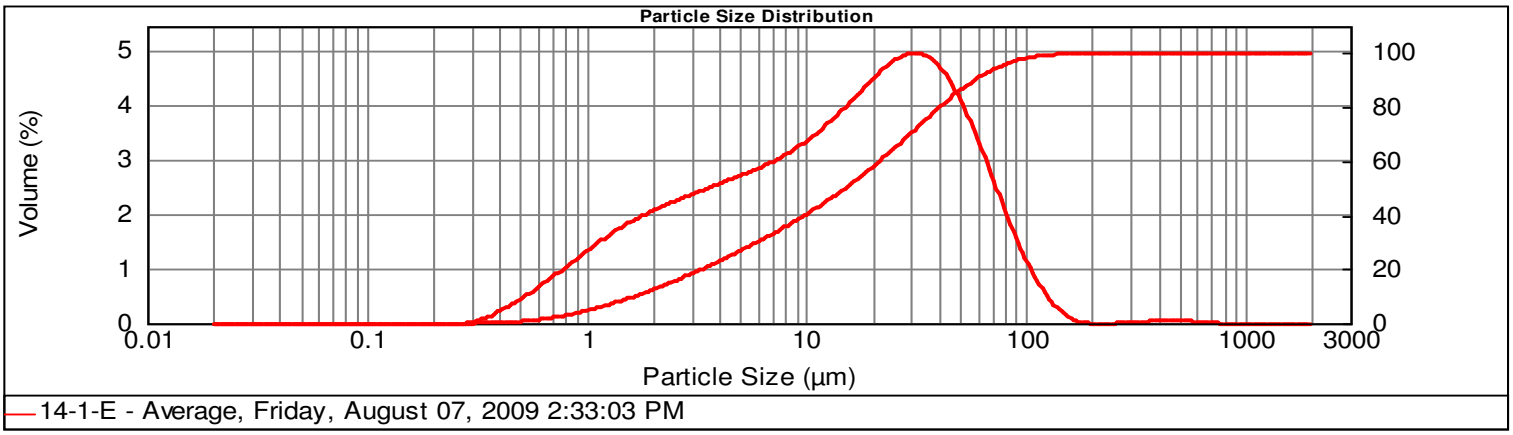
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.36 phi (Silt)

USGS
% Clay (0-2 um) = 12.41
% Fine Silt (2-3.9 um) = 10.1

d (0.1) : 1.661 **um**
d (0.5) : 15.044 **d (0.9) : 58.149**

Wentworth
% Clay (0-3.9 um) = 22.51
% Silt (3.91-31 um) = 49.04
% Coarse Silt (31 - 62.5 um) = 20.04
% Very Fine sand (62.5 - 125 um) = 7.77

% Fine sand (125-250 um) = .44
% Medium sand (250-500 um) = .13
% Coarse sand (500-1000 um) = .07
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0.07	100
1.0	(500.00)	1.5	(353.55)	0.09	99.93
1.5	(353.55)	2.0	(250.00)	0.04	99.84
2.0	(250.00)	2.5	(176.78)	0	99.81
2.5	(176.78)	3.0	(125.00)	0.44	99.81
3.0	(125.00)	3.5	(88.39)	2.28	99.36
3.5	(88.39)	4.0	(62.50)	5.49	97.08
4.0	(62.50)	4.5	(44.19)	8.88	91.59
4.5	(44.19)	5.0	(31.25)	10.9	82.72
5.0	(31.25)	5.5	(22.10)	10.98	71.81
5.5	(22.10)	6.0	(15.63)	9.84	60.83
6.0	(15.63)	6.5	(11.05)	8.47	50.99
6.5	(11.05)	7.0	(7.81)	7.37	42.52
7.0	(7.81)	7.5	(5.52)	6.59	35.14
7.5	(5.52)	8.0	(3.90)	6.01	28.55

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.5	22.54
8.5	(2.76)	9.0	(1.95)	4.94	17.04
9.0	(1.95)	9.5	(1.38)	4.28	12.1
9.5	(1.38)	10.0	(0.98)	3.42	7.82
10.0	(0.98)	10.5	(0.69)	2.41	4.4
10.5	(0.69)	11.0	(0.49)	1.4	1.99
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 14-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured:
Friday, August 07, 2009 2:26:37 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.51

D[4,3] = 26.39um = 5.24phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.83um = 8.47phi

D[v,0.5] = 17.39um = 5.85phi
D[v,0.84] = 51.38um = 4.28phi
D[v,0.95] = 81.9um = 3.61phi

Kurtosis = 4.65
Skewness = 1.78
Standard Deviation = 27.69 um = 5.17phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

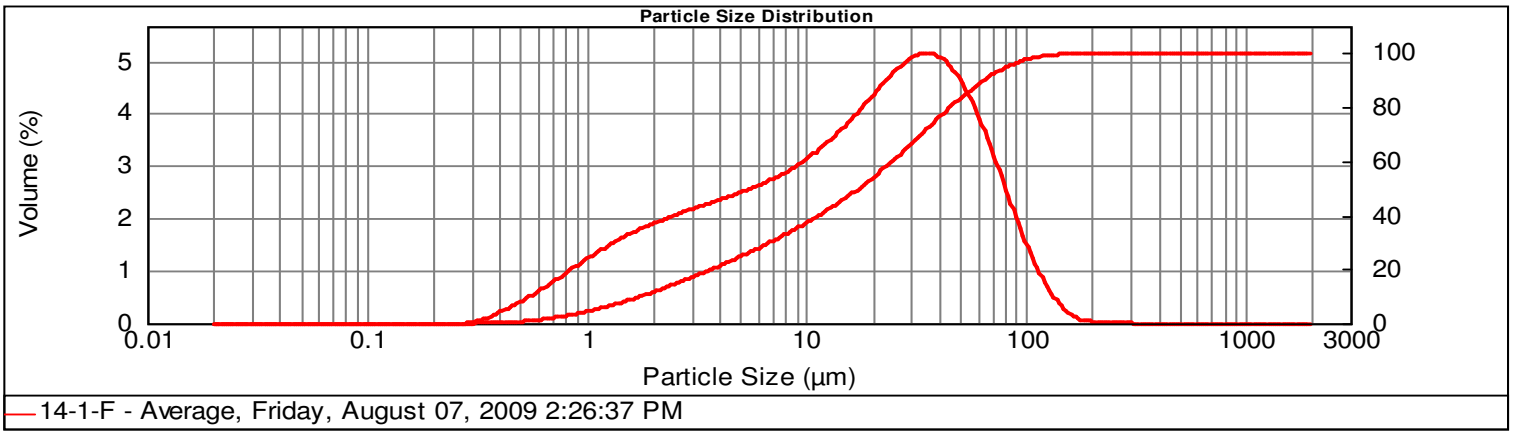
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.2 phi (Silt)

USGS
% Clay (0-2 um) = 11.44
% Fine Silt (2-3.9 um) = 9.27

d (0.1) : 1.776 **um**
d (0.5) : 17.390 **d (0.9) : 64.045**

Wentworth
% Clay (0-3.9 um) = 20.71
% Silt (3.91-31 um) = 46.76
% Coarse Silt (31 - 62.5 um) = 21.93
% Very Fine sand (62.5 - 125 um) = 9.8

% Fine sand (125-250 um) = .79
% Medium sand (250-500 um) = .01
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0.01	100
2.0	(250.00)	2.5	(176.78)	0.08	99.99
2.5	(176.78)	3.0	(125.00)	0.7	99.9
3.0	(125.00)	3.5	(88.39)	3.05	99.2
3.5	(88.39)	4.0	(62.50)	6.75	96.15
4.0	(62.50)	4.5	(44.19)	10.1	89.4
4.5	(44.19)	5.0	(31.25)	11.56	79.3
5.0	(31.25)	5.5	(22.10)	11	67.73
5.5	(22.10)	6.0	(15.63)	9.49	56.73
6.0	(15.63)	6.5	(11.05)	8	47.24
6.5	(11.05)	7.0	(7.81)	6.88	39.24
7.0	(7.81)	7.5	(5.52)	6.1	32.36
7.5	(5.52)	8.0	(3.90)	5.53	26.26

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.05	20.73
8.5	(2.76)	9.0	(1.95)	4.54	15.68
9.0	(1.95)	9.5	(1.38)	3.93	11.14
9.5	(1.38)	10.0	(0.98)	3.15	7.21
10.0	(0.98)	10.5	(0.69)	2.22	4.06
10.5	(0.69)	11.0	(0.49)	1.29	1.84
11.0	(0.49)	11.5	(0.35)	0.51	0.55
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 15-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:58:38 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.48

D[4,3] = 31.55um = 4.99phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.8um = 8.48phi

D[v,0.5] = 16.56um = 5.92phi
D[v,0.84] = 46.22um = 4.44phi
D[v,0.95] = 74.96um = 3.74phi

Kurtosis = 119.67
Skewness = 10.15
Standard Deviation = 86.34 um = 3.53phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

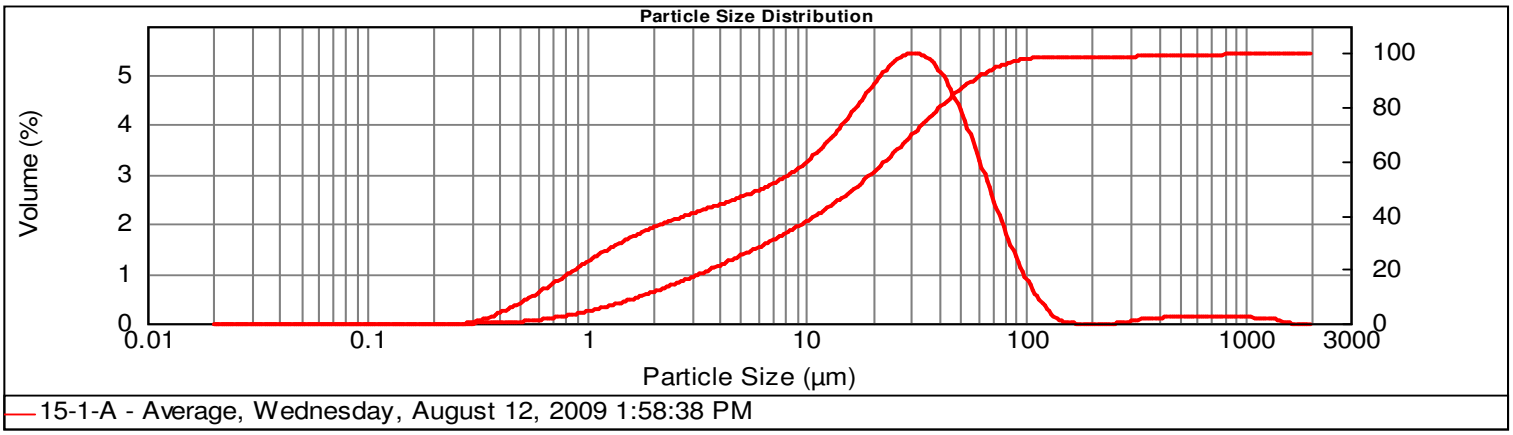
Inclusive Skewness = -0.28 (Coarse Skewed)
Inclusive Mean = 6.28 phi (Silt)

USGS
% Clay (0-2 um) = 11.53
% Fine Silt (2-3.9 um) = 9.38

d (0.1) : 1.765 **um**
d (0.5) : 16.561 **d (0.9) : 57.647**

Wentworth
% Clay (0-3.9 um) = 20.91
% Silt (3.91-31 um) = 49.58
% Coarse Silt (31 - 62.5 um) = 21.3
% Very Fine sand (62.5 - 125 um) = 6.88

% Fine sand (125-250 um) = .14
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = .59
% Very Coarse sand (1000 - 2000 um) = .25



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.02	100
-0.5	(1414.21)	0.0	(1000.00)	0.23	99.98
0.0	(1000.00)	0.5	(707.10)	0.29	99.75
0.5	(707.10)	1.0	(500.00)	0.3	99.46
1.0	(500.00)	1.5	(353.55)	0.25	99.16
1.5	(353.55)	2.0	(250.00)	0.09	98.91
2.0	(250.00)	2.5	(176.78)	0	98.81
2.5	(176.78)	3.0	(125.00)	0.14	98.81
3.0	(125.00)	3.5	(88.39)	1.74	98.67
3.5	(88.39)	4.0	(62.50)	5.14	96.93
4.0	(62.50)	4.5	(44.19)	9.18	91.8
4.5	(44.19)	5.0	(31.25)	11.84	82.62
5.0	(31.25)	5.5	(22.10)	11.99	70.78
5.5	(22.10)	6.0	(15.63)	10.4	58.79
6.0	(15.63)	6.5	(11.05)	8.51	48.39
6.5	(11.05)	7.0	(7.81)	7.11	39.88
7.0	(7.81)	7.5	(5.52)	6.22	32.77
7.5	(5.52)	8.0	(3.90)	5.61	26.55
8.0	(3.90)	8.5	(2.76)	5.11	20.93
8.5	(2.76)	9.0	(1.95)	4.59	15.82
9.0	(1.95)	9.5	(1.38)	3.97	11.23
9.5	(1.38)	10.0	(0.98)	3.17	7.26
10.0	(0.98)	10.5	(0.69)	2.23	4.09
10.5	(0.69)	11.0	(0.49)	1.3	1.86
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 15-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:04:04 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.93

D[4,3] = 38.51um = 4.7phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.64um = 8.57phi

D[v,0.5] = 15.96um = 5.97phi
D[v,0.84] = 46.07um = 4.44phi
D[v,0.95] = 76.85um = 3.7phi

Kurtosis = 85.82
Skewness = 8.79
Standard Deviation = 132.17 um = 2.92phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

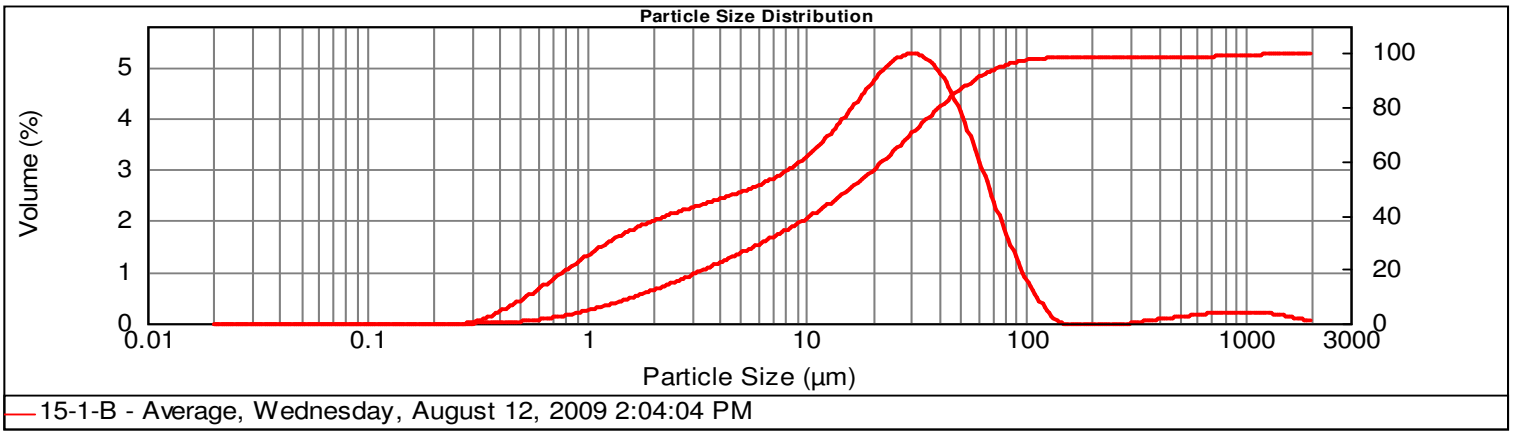
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.24
% Fine Silt (2-3.9 um) = 9.62

d (0.1) : 1.675 **um**
d (0.5) : 15.961 **d (0.9) : 58.004**

Wentworth
% Clay (0-3.9 um) = 21.86
% Silt (3.91-31 um) = 49.21
% Coarse Silt (31 - 62.5 um) = 20.51
% Very Fine sand (62.5 - 125 um) = 6.59

% Fine sand (125-250 um) = .08
% Medium sand (250-500 um) = .22
% Coarse sand (500-1000 um) = .84
% Very Coarse sand (1000 - 2000 um) = .69



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.24	100
-0.5	(1414.21)	0.0	(1000.00)	0.45	99.76
0.0	(1000.00)	0.5	(707.10)	0.48	99.31
0.5	(707.10)	1.0	(500.00)	0.36	98.83
1.0	(500.00)	1.5	(353.55)	0.2	98.48
1.5	(353.55)	2.0	(250.00)	0.02	98.28
2.0	(250.00)	2.5	(176.78)	0	98.26
2.5	(176.78)	3.0	(125.00)	0.08	98.26
3.0	(125.00)	3.5	(88.39)	1.65	98.18
3.5	(88.39)	4.0	(62.50)	4.94	96.52
4.0	(62.50)	4.5	(44.19)	8.82	91.59
4.5	(44.19)	5.0	(31.25)	11.42	82.77
5.0	(31.25)	5.5	(22.10)	11.67	71.35
5.5	(22.10)	6.0	(15.63)	10.25	59.68
6.0	(15.63)	6.5	(11.05)	8.48	49.42
6.5	(11.05)	7.0	(7.81)	7.13	40.94
7.0	(7.81)	7.5	(5.52)	6.25	33.81
7.5	(5.52)	8.0	(3.90)	5.67	27.56

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.21	21.88
8.5	(2.76)	9.0	(1.95)	4.74	16.67
9.0	(1.95)	9.5	(1.38)	4.16	11.93
9.5	(1.38)	10.0	(0.98)	3.37	7.77
10.0	(0.98)	10.5	(0.69)	2.39	4.4
10.5	(0.69)	11.0	(0.49)	1.4	2.01
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 15-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:08:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.98

D[4,3] = 43.1um = 4.54phi
D[v,0.05] = 1.1um = 9.83phi
D[v,0.16] = 2.81um = 8.48phi

D[v,0.5] = 17.28um = 5.85phi
D[v,0.84] = 50.61um = 4.3phi
D[v,0.95] = 87.78um = 3.51phi

Kurtosis = 69.64
Skewness = 7.85
Standard Deviation = 137.28 um = 2.86phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

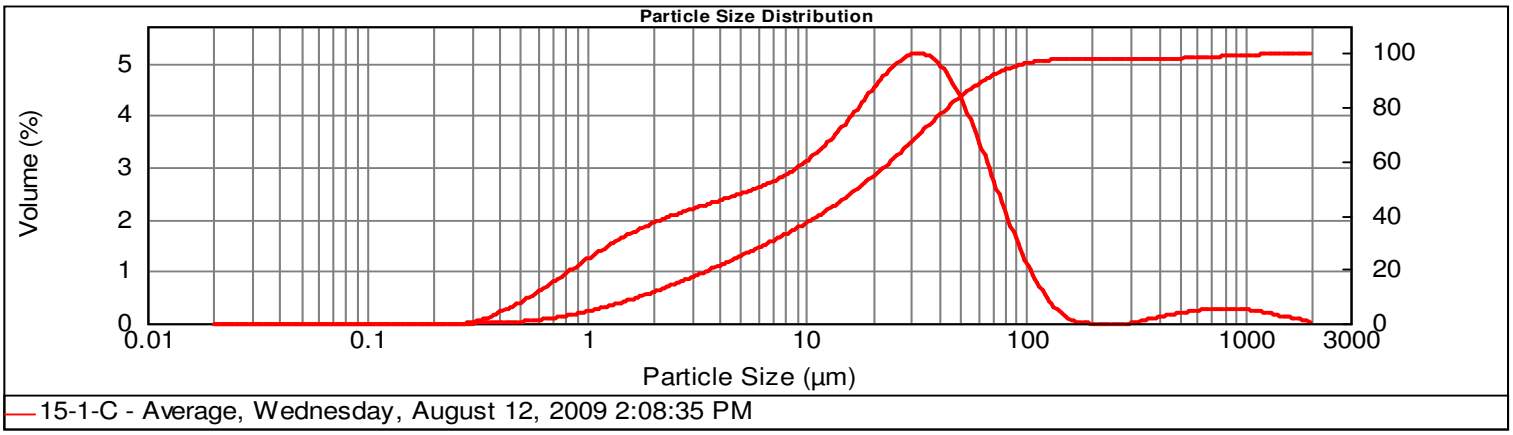
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.21 phi (Silt)

USGS
% Clay (0-2 um) = 11.48
% Fine Silt (2-3.9 um) = 9.35

d (0.1) : 1.772 **um**
d (0.5) : 17.281 **d (0.9) : 64.432**

Wentworth
% Clay (0-3.9 um) = 20.84
% Silt (3.91-31 um) = 47.37
% Coarse Silt (31 - 62.5 um) = 21.13
% Very Fine sand (62.5 - 125 um) = 8.05

% Fine sand (125-250 um) = .4
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = 1.18
% Very Coarse sand (1000 - 2000 um) = .69



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.49	99.79
0.0	(1000.00)	0.5	(707.10)	0.64	99.31
0.5	(707.10)	1.0	(500.00)	0.54	98.67
1.0	(500.00)	1.5	(353.55)	0.3	98.12
1.5	(353.55)	2.0	(250.00)	0.03	97.83
2.0	(250.00)	2.5	(176.78)	0	97.79
2.5	(176.78)	3.0	(125.00)	0.4	97.79
3.0	(125.00)	3.5	(88.39)	2.32	97.39
3.5	(88.39)	4.0	(62.50)	5.74	95.08
4.0	(62.50)	4.5	(44.19)	9.38	89.34
4.5	(44.19)	5.0	(31.25)	11.49	79.96
5.0	(31.25)	5.5	(22.10)	11.34	68.48
5.5	(22.10)	6.0	(15.63)	9.79	57.13
6.0	(15.63)	6.5	(11.05)	8.08	47.34
6.5	(11.05)	7.0	(7.81)	6.83	39.26
7.0	(7.81)	7.5	(5.52)	6.05	32.43
7.5	(5.52)	8.0	(3.90)	5.52	26.38
8.0	(3.90)	8.5	(2.76)	5.08	20.86
8.5	(2.76)	9.0	(1.95)	4.59	15.78
9.0	(1.95)	9.5	(1.38)	3.97	11.19
9.5	(1.38)	10.0	(0.98)	3.16	7.22
10.0	(0.98)	10.5	(0.69)	2.22	4.05
10.5	(0.69)	11.0	(0.49)	1.29	1.83
11.0	(0.49)	11.5	(0.35)	0.5	0.55
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 15-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:13:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.02

D[4,3] = 34.3um = 4.87phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.65um = 8.56phi

D[v,0.5] = 15.61um = 6phi
D[v,0.84] = 44.63um = 4.49phi
D[v,0.95] = 73.28um = 3.77phi

Kurtosis = 107.16
Skewness = 9.72
Standard Deviation = 112.62 um = 3.15phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

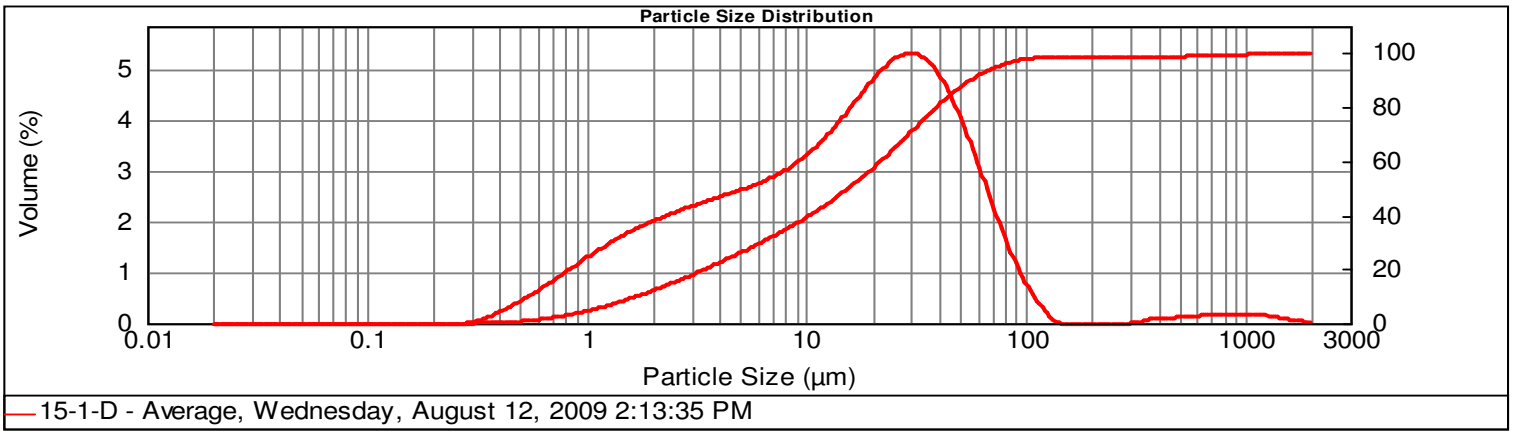
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.35 phi (Silt)

USGS
% Clay (0-2 um) = 12.09
% Fine Silt (2-3.9 um) = 9.81

d (0.1) : 1.696 **um**
d (0.5) : 15.612 **d (0.9) : 55.928**

Wentworth
% Clay (0-3.9 um) = 21.9
% Silt (3.91-31 um) = 50.11
% Coarse Silt (31 - 62.5 um) = 20.35
% Very Fine sand (62.5 - 125 um) = 6.17

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .23
% Coarse sand (500-1000 um) = .72
% Very Coarse sand (1000 - 2000 um) = .48



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.13	100
-0.5	(1414.21)	0.0	(1000.00)	0.35	99.87
0.0	(1000.00)	0.5	(707.10)	0.4	99.52
0.5	(707.10)	1.0	(500.00)	0.32	99.13
1.0	(500.00)	1.5	(353.55)	0.21	98.8
1.5	(353.55)	2.0	(250.00)	0.03	98.6
2.0	(250.00)	2.5	(176.78)	0	98.57
2.5	(176.78)	3.0	(125.00)	0.04	98.57
3.0	(125.00)	3.5	(88.39)	1.48	98.53
3.5	(88.39)	4.0	(62.50)	4.69	97.05
4.0	(62.50)	4.5	(44.19)	8.65	92.36
4.5	(44.19)	5.0	(31.25)	11.42	83.71
5.0	(31.25)	5.5	(22.10)	11.82	72.29
5.5	(22.10)	6.0	(15.63)	10.44	60.46
6.0	(15.63)	6.5	(11.05)	8.64	50.02
6.5	(11.05)	7.0	(7.81)	7.25	41.38
7.0	(7.81)	7.5	(5.52)	6.39	34.13
7.5	(5.52)	8.0	(3.90)	5.83	27.75
8.0	(3.90)	8.5	(2.76)	5.34	21.92
8.5	(2.76)	9.0	(1.95)	4.8	16.58
9.0	(1.95)	9.5	(1.38)	4.15	11.78
9.5	(1.38)	10.0	(0.98)	3.32	7.63
10.0	(0.98)	10.5	(0.69)	2.34	4.31
10.5	(0.69)	11.0	(0.49)	1.37	1.96
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 15-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:18:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.97

D[4,3] = 33.82um = 4.89phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 14.65um = 6.09phi
D[v,0.84] = 42.09um = 4.57phi
D[v,0.95] = 69.7um = 3.84phi

Kurtosis = 105.74
Skewness = 9.7
Standard Deviation = 117.71 um = 3.09phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

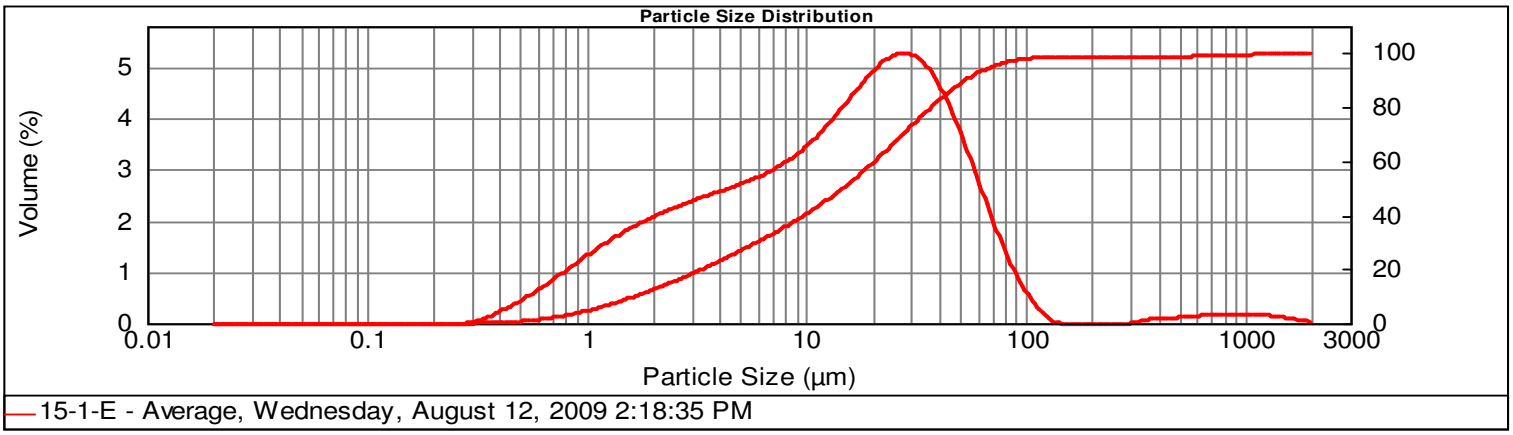
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 12.35
% Fine Silt (2-3.9 um) = 10.14

d (0.1) : 1.669 **um**
d (0.5) : 14.648 **d (0.9) : 52.893**

Wentworth
% Clay (0-3.9 um) = 22.5
% Silt (3.91-31 um) = 51.64
% Coarse Silt (31 - 62.5 um) = 19.2
% Very Fine sand (62.5 - 125 um) = 5.17

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .23
% Coarse sand (500-1000 um) = .71
% Very Coarse sand (1000 - 2000 um) = .53



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.35	99.83
0.0	(1000.00)	0.5	(707.10)	0.4	99.47
0.5	(707.10)	1.0	(500.00)	0.31	99.08
1.0	(500.00)	1.5	(353.55)	0.2	98.76
1.5	(353.55)	2.0	(250.00)	0.03	98.56
2.0	(250.00)	2.5	(176.78)	0	98.53
2.5	(176.78)	3.0	(125.00)	0.03	98.53
3.0	(125.00)	3.5	(88.39)	1.14	98.5
3.5	(88.39)	4.0	(62.50)	4.03	97.36
4.0	(62.50)	4.5	(44.19)	7.92	93.33
4.5	(44.19)	5.0	(31.25)	11	85.41
5.0	(31.25)	5.5	(22.10)	11.84	74.41
5.5	(22.10)	6.0	(15.63)	10.76	62.57
6.0	(15.63)	6.5	(11.05)	9.02	51.81
6.5	(11.05)	7.0	(7.81)	7.58	42.79
7.0	(7.81)	7.5	(5.52)	6.64	35.21
7.5	(5.52)	8.0	(3.90)	6.04	28.56
8.0	(3.90)	8.5	(2.76)	5.53	22.53
8.5	(2.76)	9.0	(1.95)	4.96	17
9.0	(1.95)	9.5	(1.38)	4.27	12.04
9.5	(1.38)	10.0	(0.98)	3.4	7.76
10.0	(0.98)	10.5	(0.69)	2.39	4.36
10.5	(0.69)	11.0	(0.49)	1.38	1.98
11.0	(0.49)	11.5	(0.35)	0.55	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 15-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:23:06 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.27

D[4,3] = 36.65um = 4.77phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.69um = 8.54phi

D[v,0.5] = 15.72um = 5.99phi
D[v,0.84] = 46.93um = 4.41phi
D[v,0.95] = 79.09um = 3.66phi

Kurtosis = 98.47
Skewness = 9.33
Standard Deviation = 121.12 um = 3.05phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

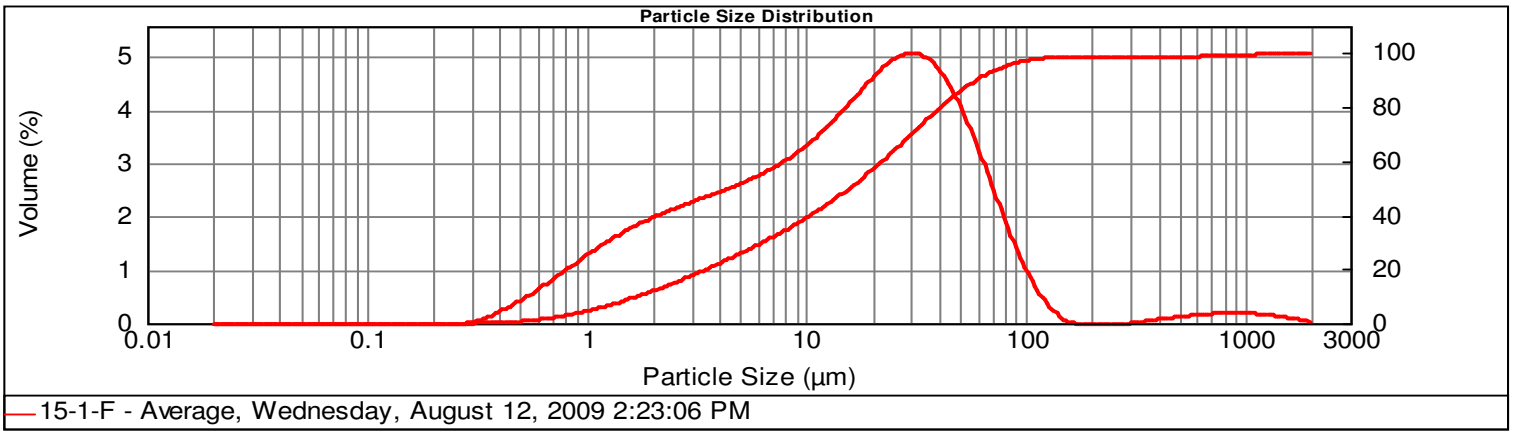
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.31 phi (Silt)

USGS
% Clay (0-2 um) = 11.94
% Fine Silt (2-3.9 um) = 9.69

d (0.1) : 1.714 **um**
d (0.5) : 15.722 **d (0.9) : 59.484**

Wentworth
% Clay (0-3.9 um) = 21.63
% Silt (3.91-31 um) = 49.31
% Coarse Silt (31 - 62.5 um) = 20.11
% Very Fine sand (62.5 - 125 um) = 7.19

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .2
% Coarse sand (500-1000 um) = .77
% Very Coarse sand (1000 - 2000 um) = .56



Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
-1	(2000.00)	-0.5	(1414.21)	0.18	100
-0.5	(1414.21)	0.0	(1000.00)	0.37	99.82
0.0	(1000.00)	0.5	(707.10)	0.43	99.44
0.5	(707.10)	1.0	(500.00)	0.34	99.02
1.0	(500.00)	1.5	(353.55)	0.19	98.67
1.5	(353.55)	2.0	(250.00)	0.01	98.48
2.0	(250.00)	2.5	(176.78)	0	98.47
2.5	(176.78)	3.0	(125.00)	0.23	98.47
3.0	(125.00)	3.5	(88.39)	1.97	98.24
3.5	(88.39)	4.0	(62.50)	5.22	96.27
4.0	(62.50)	4.5	(44.19)	8.79	91.05
4.5	(44.19)	5.0	(31.25)	11.05	82.26
5.0	(31.25)	5.5	(22.10)	11.28	71.21
5.5	(22.10)	6.0	(15.63)	10.1	59.93
6.0	(15.63)	6.5	(11.05)	8.58	49.83
6.5	(11.05)	7.0	(7.81)	7.34	41.25
7.0	(7.81)	7.5	(5.52)	6.45	33.91
7.5	(5.52)	8.0	(3.90)	5.81	27.46

Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
8.0	(3.90)	8.5	(2.76)	5.28	21.66
8.5	(2.76)	9.0	(1.95)	4.75	16.38
9.0	(1.95)	9.5	(1.38)	4.11	11.63
9.5	(1.38)	10.0	(0.98)	3.28	7.53
10.0	(0.98)	10.5	(0.69)	2.31	4.24
10.5	(0.69)	11.0	(0.49)	1.35	1.93
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured:
Wednesday, August 12, 2009
11:10:08 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.13

D[4,3] = 37um = 4.76phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.3um = 8.76phi

D[v,0.5] = 12.06um = 6.37phi
D[v,0.84] = 40.18um = 4.64phi
D[v,0.95] = 72.87um = 3.78phi

Kurtosis = 76.41
Skewness = 8.32
Standard Deviation = 137.93 um = 2.86phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

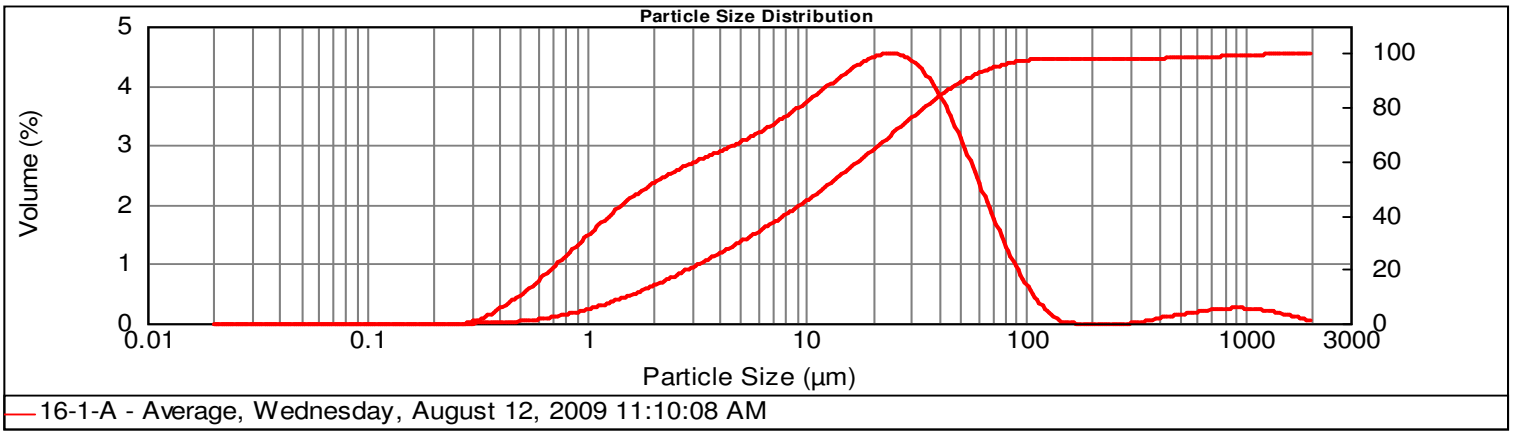
Inclusive Skewness = -0.16 (Coarse Skewed)
Inclusive Mean = 6.59 phi (Silt)

USGS
% Clay (0-2 um) = 13.8
% Fine Silt (2-3.9 um) = 11.47

d (0.1) : 1.538 **um**
d (0.5) : 12.059 **d (0.9) : 52.446**

Wentworth
% Clay (0-3.9 um) = 25.27
% Silt (3.91-31 um) = 51.66
% Coarse Silt (31 - 62.5 um) = 16.08
% Very Fine sand (62.5 - 125 um) = 4.94

% Fine sand (125-250 um) = .09
% Medium sand (250-500 um) = .23
% Coarse sand (500-1000 um) = .99
% Very Coarse sand (1000 - 2000 um) = .74



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.24	100
-0.5	(1414.21)	0.0	(1000.00)	0.5	99.76
0.0	(1000.00)	0.5	(707.10)	0.56	99.26
0.5	(707.10)	1.0	(500.00)	0.43	98.7
1.0	(500.00)	1.5	(353.55)	0.21	98.27
1.5	(353.55)	2.0	(250.00)	0.01	98.06
2.0	(250.00)	2.5	(176.78)	0	98.05
2.5	(176.78)	3.0	(125.00)	0.09	98.05
3.0	(125.00)	3.5	(88.39)	1.27	97.95
3.5	(88.39)	4.0	(62.50)	3.67	96.68
4.0	(62.50)	4.5	(44.19)	6.69	93.01
4.5	(44.19)	5.0	(31.25)	9.16	86.32
5.0	(31.25)	5.5	(22.10)	10.22	77.16
5.5	(22.10)	6.0	(15.63)	10	66.94
6.0	(15.63)	6.5	(11.05)	9.17	56.94
6.5	(11.05)	7.0	(7.81)	8.25	47.77
7.0	(7.81)	7.5	(5.52)	7.44	39.52
7.5	(5.52)	8.0	(3.90)	6.78	32.08
8.0	(3.90)	8.5	(2.76)	6.23	25.3
8.5	(2.76)	9.0	(1.95)	5.63	19.07
9.0	(1.95)	9.5	(1.38)	4.83	13.43
9.5	(1.38)	10.0	(0.98)	3.8	8.6
10.0	(0.98)	10.5	(0.69)	2.63	4.8
10.5	(0.69)	11.0	(0.49)	1.51	2.17
11.0	(0.49)	11.5	(0.35)	0.6	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 11:28:15 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.93

D[4,3] = 63.61um = 3.97phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 13.4um = 6.22phi
D[v,0.84] = 45.36um = 4.46phi
D[v,0.95] = 419.58um = 1.25phi

Kurtosis = 28.2
Skewness = 5.05
Standard Deviation = 198.23 um = 2.33phi

Inclusive SD (Sorting Coeff.) = 2.36 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.21 phi (Leptokurtic)

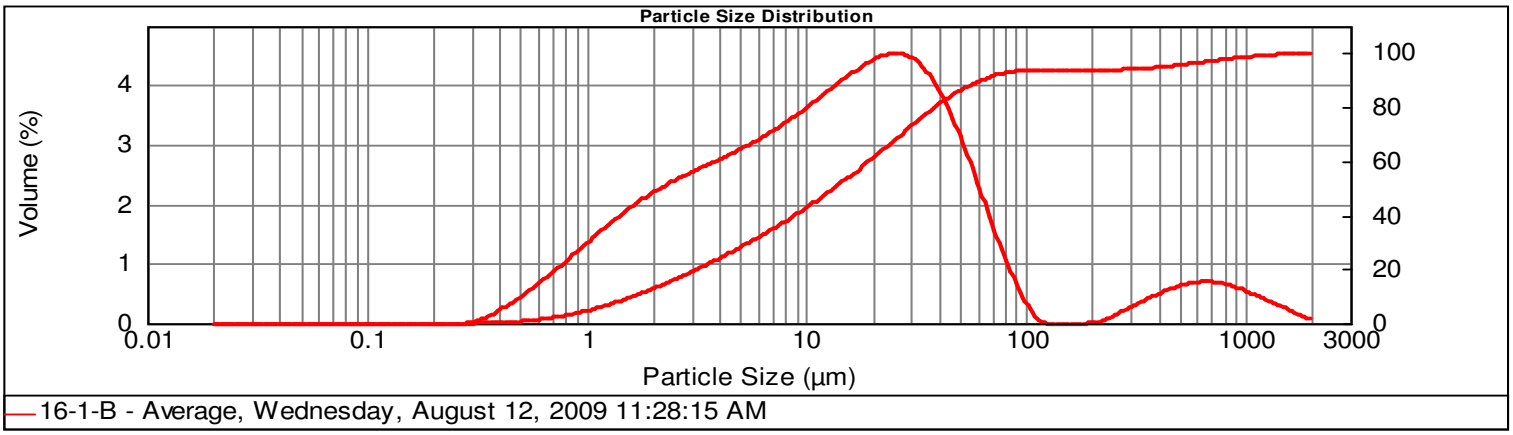
Inclusive Skewness = -0.01 (Near Symmetrical)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 12.71
% Fine Silt (2-3.9 um) = 10.79

d (0.1) : 1.640 **um**
d (0.5) : 13.399 **d (0.9) : 62.379**

Wentworth
% Clay (0-3.9 um) = 23.49
% Silt (3.91-31 um) = 50.4
% Coarse Silt (31 - 62.5 um) = 16.13
% Very Fine sand (62.5 - 125 um) = 3.8

% Fine sand (125-250 um) = .06
% Medium sand (250-500 um) = 1.77
% Coarse sand (500-1000 um) = 2.98
% Very Coarse sand (1000 - 2000 um) = 1.36



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.4	100
-0.5	(1414.21)	0.0	(1000.00)	0.96	99.6
0.0	(1000.00)	0.5	(707.10)	1.44	98.64
0.5	(707.10)	1.0	(500.00)	1.54	97.2
1.0	(500.00)	1.5	(353.55)	1.18	95.66
1.5	(353.55)	2.0	(250.00)	0.59	94.48
2.0	(250.00)	2.5	(176.78)	0.06	93.89
2.5	(176.78)	3.0	(125.00)	0	93.83
3.0	(125.00)	3.5	(88.39)	0.59	93.83
3.5	(88.39)	4.0	(62.50)	3.22	93.24
4.0	(62.50)	4.5	(44.19)	6.64	90.03
4.5	(44.19)	5.0	(31.25)	9.26	83.39
5.0	(31.25)	5.5	(22.10)	10.21	74.13
5.5	(22.10)	6.0	(15.63)	9.84	63.92
6.0	(15.63)	6.5	(11.05)	8.93	54.08
6.5	(11.05)	7.0	(7.81)	7.99	45.15
7.0	(7.81)	7.5	(5.52)	7.16	37.15
7.5	(5.52)	8.0	(3.90)	6.47	29.99

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.89	23.52
8.5	(2.76)	9.0	(1.95)	5.27	17.64
9.0	(1.95)	9.5	(1.38)	4.48	12.37
9.5	(1.38)	10.0	(0.98)	3.51	7.89
10.0	(0.98)	10.5	(0.69)	2.42	4.38
10.5	(0.69)	11.0	(0.49)	1.38	1.96
11.0	(0.49)	11.5	(0.35)	0.54	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 11:36:32 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.05

D[4,3] = 44.31um = 4.5phi
D[v,0.05] = .98um = 10phi
D[v,0.16] = 2.25um = 8.79phi

D[v,0.5] = 11.7um = 6.42phi
D[v,0.84] = 38.3um = 4.71phi
D[v,0.95] = 69.68um = 3.84phi

Kurtosis = 49.55
Skewness = 6.84
Standard Deviation = 170.95 um = 2.55phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

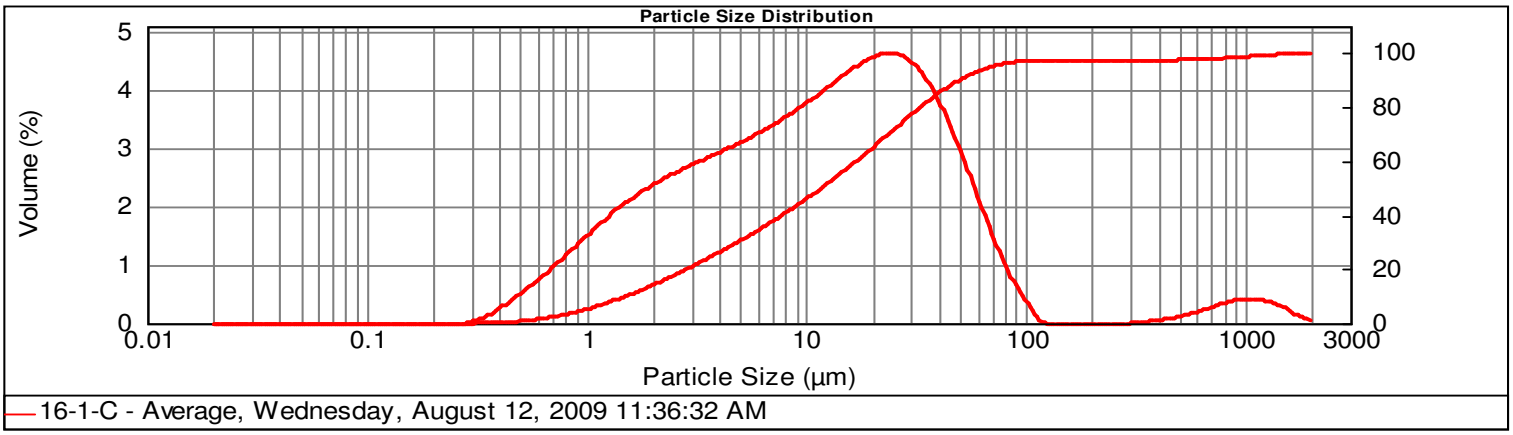
Inclusive Skewness = -0.16 (Coarse Skewed)
Inclusive Mean = 6.64 phi (Silt)

USGS
% Clay (0-2 um) = 14.12
% Fine Silt (2-3.9 um) = 11.58

d (0.1) : 1.507 **um**
d (0.5) : 11.700 **d (0.9) : 49.748**

Wentworth
% Clay (0-3.9 um) = 25.7
% Silt (3.91-31 um) = 52.46
% Coarse Silt (31 - 62.5 um) = 15.58
% Very Fine sand (62.5 - 125 um) = 3.59

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .16
% Coarse sand (500-1000 um) = 1.25
% Very Coarse sand (1000 - 2000 um) = 1.26



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.39	100
-0.5	(1414.21)	0.0	(1000.00)	0.87	99.61
0.0	(1000.00)	0.5	(707.10)	0.82	98.74
0.5	(707.10)	1.0	(500.00)	0.44	97.92
1.0	(500.00)	1.5	(353.55)	0.15	97.49
1.5	(353.55)	2.0	(250.00)	0.01	97.34
2.0	(250.00)	2.5	(176.78)	0	97.33
2.5	(176.78)	3.0	(125.00)	0	97.33
3.0	(125.00)	3.5	(88.39)	0.62	97.33
3.5	(88.39)	4.0	(62.50)	2.97	96.71
4.0	(62.50)	4.5	(44.19)	6.25	93.74
4.5	(44.19)	5.0	(31.25)	9.1	87.49
5.0	(31.25)	5.5	(22.10)	10.38	78.39
5.5	(22.10)	6.0	(15.63)	10.18	68.01
6.0	(15.63)	6.5	(11.05)	9.3	57.83
6.5	(11.05)	7.0	(7.81)	8.36	48.53
7.0	(7.81)	7.5	(5.52)	7.56	40.17
7.5	(5.52)	8.0	(3.90)	6.88	32.61

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.3	25.73
8.5	(2.76)	9.0	(1.95)	5.68	19.43
9.0	(1.95)	9.5	(1.38)	4.9	13.75
9.5	(1.38)	10.0	(0.98)	3.89	8.86
10.0	(0.98)	10.5	(0.69)	2.72	4.97
10.5	(0.69)	11.0	(0.49)	1.57	2.25
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 11:46:12 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 27.92

D[4,3] = 36.13um = 4.79phi
D[v,0.05] = .96um = 10.02phi
D[v,0.16] = 2.26um = 8.79phi

D[v,0.5] = 12.61um = 6.31phi
D[v,0.84] = 40.01um = 4.64phi
D[v,0.95] = 68.75um = 3.86phi

Kurtosis = 87.1
Skewness = 8.94
Standard Deviation = 139.94 um = 2.84phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .86 phi (Platykurtic)

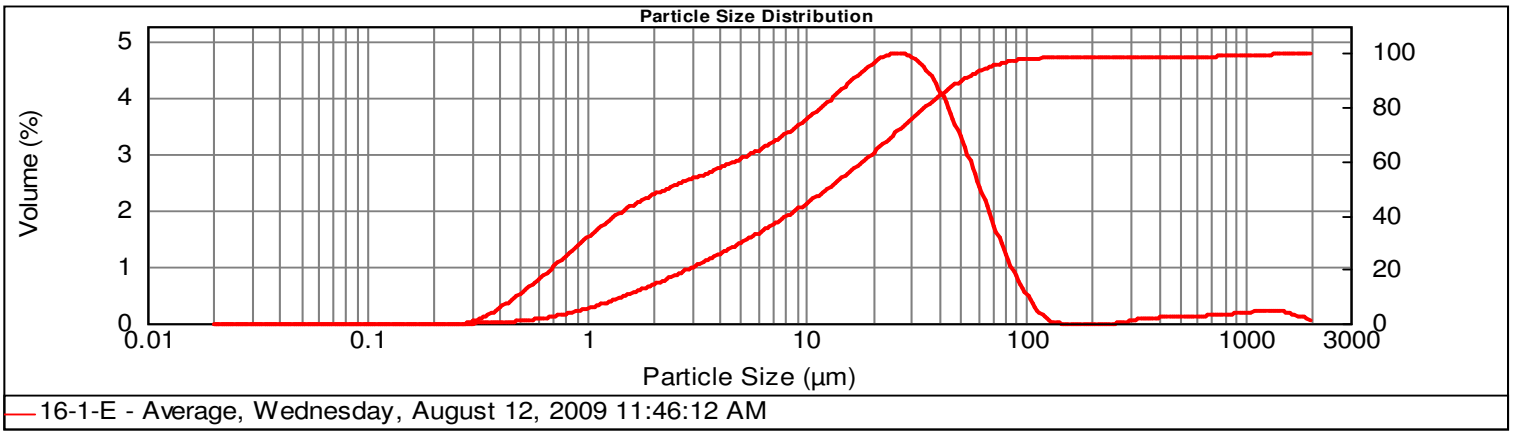
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.58 phi (Silt)

USGS
% Clay (0-2 um) = 14.12
% Fine Silt (2-3.9 um) = 10.95

d (0.1) : 1.491 **um**
d (0.5) : 12.609 **d (0.9) : 51.140**

Wentworth
% Clay (0-3.9 um) = 25.07
% Silt (3.91-31 um) = 51.46
% Coarse Silt (31 - 62.5 um) = 17.15
% Very Fine sand (62.5 - 125 um) = 4.52

% Fine sand (125-250 um) = .01
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = .65
% Very Coarse sand (1000 - 2000 um) = .81



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.33	100
-0.5	(1414.21)	0.0	(1000.00)	0.47	99.67
0.0	(1000.00)	0.5	(707.10)	0.36	99.19
0.5	(707.10)	1.0	(500.00)	0.29	98.83
1.0	(500.00)	1.5	(353.55)	0.24	98.54
1.5	(353.55)	2.0	(250.00)	0.09	98.31
2.0	(250.00)	2.5	(176.78)	0	98.21
2.5	(176.78)	3.0	(125.00)	0.01	98.21
3.0	(125.00)	3.5	(88.39)	0.93	98.2
3.5	(88.39)	4.0	(62.50)	3.59	97.27
4.0	(62.50)	4.5	(44.19)	7.07	93.68
4.5	(44.19)	5.0	(31.25)	9.83	86.61
5.0	(31.25)	5.5	(22.10)	10.8	76.77
5.5	(22.10)	6.0	(15.63)	10.22	65.97
6.0	(15.63)	6.5	(11.05)	9.06	55.75
6.5	(11.05)	7.0	(7.81)	7.98	46.68
7.0	(7.81)	7.5	(5.52)	7.13	38.7
7.5	(5.52)	8.0	(3.90)	6.47	31.57

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.93	25.1
8.5	(2.76)	9.0	(1.95)	5.4	19.17
9.0	(1.95)	9.5	(1.38)	4.76	13.77
9.5	(1.38)	10.0	(0.98)	3.87	9.02
10.0	(0.98)	10.5	(0.69)	2.77	5.15
10.5	(0.69)	11.0	(0.49)	1.64	2.37
11.0	(0.49)	11.5	(0.35)	0.67	0.74
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 11:50:55 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.53

D[4,3] = 20.79um = 5.59phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.34um = 8.74phi

D[v,0.5] = 12.92um = 6.27phi
D[v,0.84] = 41.49um = 4.59phi
D[v,0.95] = 66.59um = 3.91phi

Kurtosis = 2.33
Skewness = 1.54
Standard Deviation = 21.88 um = 5.51phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .84 phi (Platykurtic)

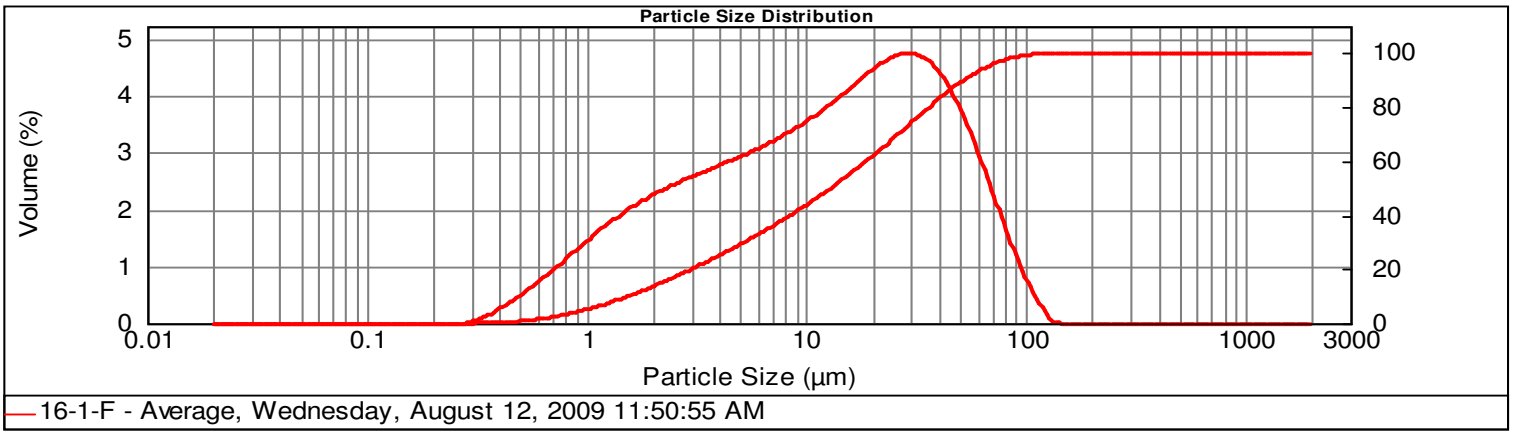
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.53 phi (Silt)

USGS
% Clay (0-2 um) = 13.6
% Fine Silt (2-3.9 um) = 11

d (0.1) : 1.544 **um**
d (0.5) : 12.924 **d (0.9) : 52.103**

Wentworth
% Clay (0-3.9 um) = 24.6
% Silt (3.91-31 um) = 50.63
% Coarse Silt (31 - 62.5 um) = 18.64
% Very Fine sand (62.5 - 125 um) = 6.1

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.02	100
3.0	(125.00)	3.5	(88.39)	1.46	99.98
3.5	(88.39)	4.0	(62.50)	4.64	98.52
4.0	(62.50)	4.5	(44.19)	8.1	93.88
4.5	(44.19)	5.0	(31.25)	10.29	85.77
5.0	(31.25)	5.5	(22.10)	10.66	75.48
5.5	(22.10)	6.0	(15.63)	9.87	64.82
6.0	(15.63)	6.5	(11.05)	8.8	54.95
6.5	(11.05)	7.0	(7.81)	7.87	46.14
7.0	(7.81)	7.5	(5.52)	7.13	38.27
7.5	(5.52)	8.0	(3.90)	6.52	31.15

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.98	24.63
8.5	(2.76)	9.0	(1.95)	5.39	18.65
9.0	(1.95)	9.5	(1.38)	4.67	13.25
9.5	(1.38)	10.0	(0.98)	3.73	8.59
10.0	(0.98)	10.5	(0.69)	2.63	4.86
10.5	(0.69)	11.0	(0.49)	1.54	2.23
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-T1 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured:
Wednesday, August 12, 2009
11:55:28 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.06

D[4,3] = 33.77um = 4.89phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.67um = 8.55phi

D[v,0.5] = 14.97um = 6.06phi
D[v,0.84] = 45.43um = 4.46phi
D[v,0.95] = 76.08um = 3.72phi

Kurtosis = 115.47
Skewness = 10
Standard Deviation = 107.85 um = 3.21phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

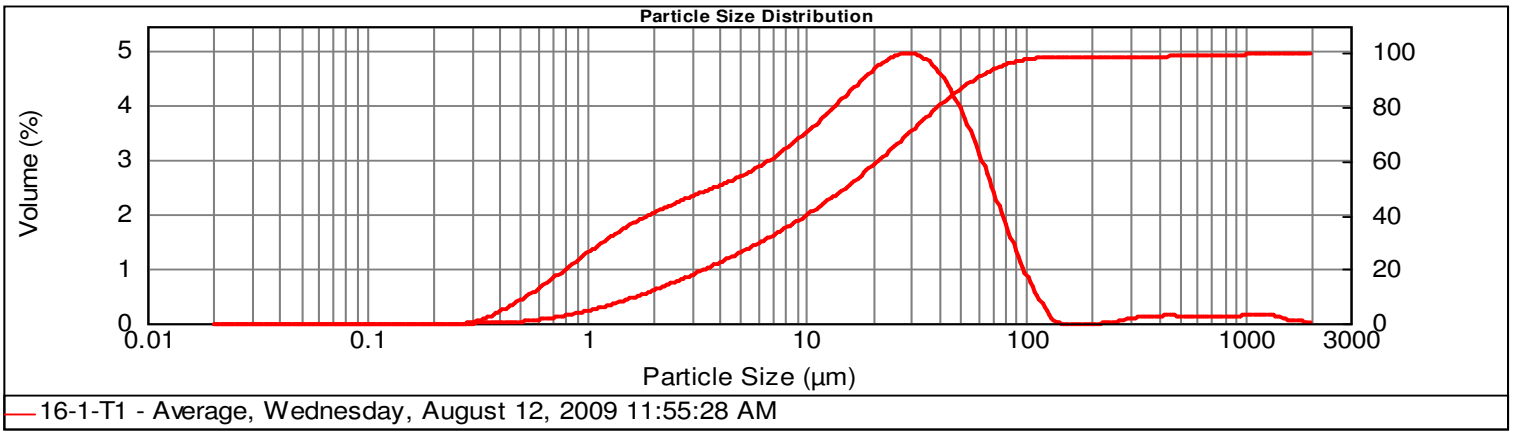
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.36 phi (Silt)

USGS
% Clay (0-2 um) = 12
% Fine Silt (2-3.9 um) = 9.89

d (0.1) : 1.709 **um**
d (0.5) : 14.973 **d (0.9) : 57.620**

Wentworth
% Clay (0-3.9 um) = 21.89
% Silt (3.91-31 um) = 50.36
% Coarse Silt (31 - 62.5 um) = 19.46
% Very Fine sand (62.5 - 125 um) = 6.71

% Fine sand (125-250 um) = .05
% Medium sand (250-500 um) = .49
% Coarse sand (500-1000 um) = .6
% Very Coarse sand (1000 - 2000 um) = .44



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.12	100
-0.5	(1414.21)	0.0	(1000.00)	0.32	99.88
0.0	(1000.00)	0.5	(707.10)	0.3	99.56
0.5	(707.10)	1.0	(500.00)	0.3	99.26
1.0	(500.00)	1.5	(353.55)	0.31	98.96
1.5	(353.55)	2.0	(250.00)	0.18	98.65
2.0	(250.00)	2.5	(176.78)	0	98.47
2.5	(176.78)	3.0	(125.00)	0.05	98.47
3.0	(125.00)	3.5	(88.39)	1.71	98.42
3.5	(88.39)	4.0	(62.50)	5.01	96.71
4.0	(62.50)	4.5	(44.19)	8.49	91.71
4.5	(44.19)	5.0	(31.25)	10.71	83.22
5.0	(31.25)	5.5	(22.10)	11.11	72.51
5.5	(22.10)	6.0	(15.63)	10.23	61.4
6.0	(15.63)	6.5	(11.05)	8.91	51.17
6.5	(11.05)	7.0	(7.81)	7.68	42.26
7.0	(7.81)	7.5	(5.52)	6.7	34.58
7.5	(5.52)	8.0	(3.90)	5.97	27.89

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.4	21.92
8.5	(2.76)	9.0	(1.95)	4.83	16.52
9.0	(1.95)	9.5	(1.38)	4.16	11.69
9.5	(1.38)	10.0	(0.98)	3.3	7.54
10.0	(0.98)	10.5	(0.69)	2.31	4.23
10.5	(0.69)	11.0	(0.49)	1.34	1.92
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-T2 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:01:06 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.18

D[4,3] = 46.11um = 4.44phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.53um = 8.63phi

D[v,0.5] = 14.65um = 6.09phi
D[v,0.84] = 43.27um = 4.53phi
D[v,0.95] = 73.58um = 3.76phi

Kurtosis = 49.46
Skewness = 6.86
Standard Deviation = 168.79 um = 2.57phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

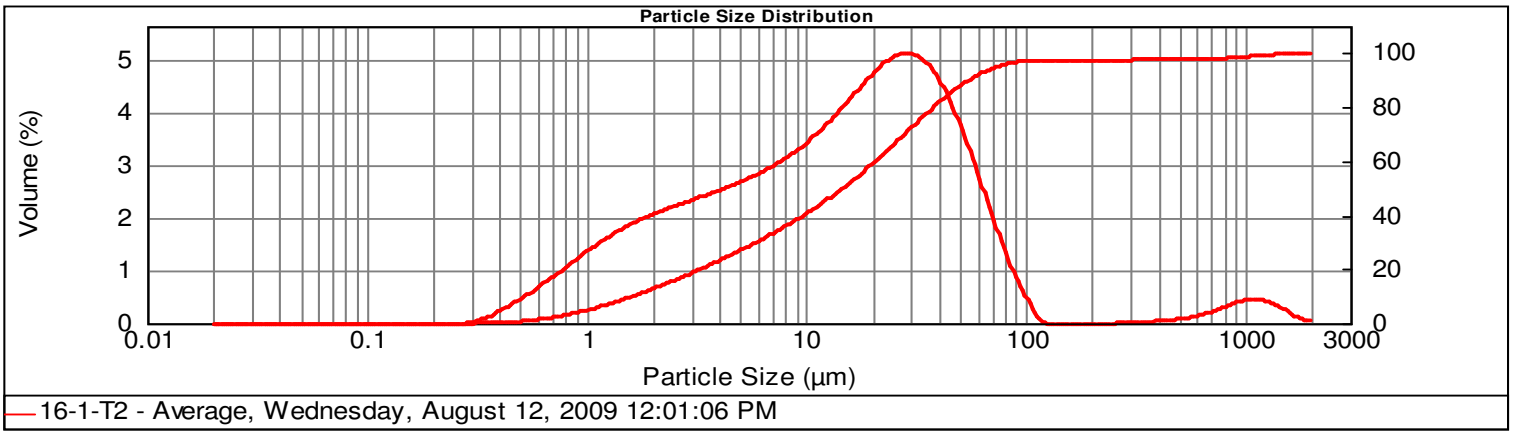
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 12.71
% Fine Silt (2-3.9 um) = 10.02

d (0.1) : 1.625 **um**
d (0.5) : 14.651 **d (0.9) : 54.712**

Wentworth
% Clay (0-3.9 um) = 22.73
% Silt (3.91-31 um) = 50.7
% Coarse Silt (31 - 62.5 um) = 19.19
% Very Fine sand (62.5 - 125 um) = 4.84

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .14
% Coarse sand (500-1000 um) = 1.1
% Very Coarse sand (1000 - 2000 um) = 1.3



Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
-1	(2000.00)	-0.5	(1414.21)	0.35	100
-0.5	(1414.21)	0.0	(1000.00)	0.95	99.65
0.0	(1000.00)	0.5	(707.10)	0.78	98.7
0.5	(707.10)	1.0	(500.00)	0.32	97.92
1.0	(500.00)	1.5	(353.55)	0.11	97.6
1.5	(353.55)	2.0	(250.00)	0.03	97.49
2.0	(250.00)	2.5	(176.78)	0	97.46
2.5	(176.78)	3.0	(125.00)	0	97.46
3.0	(125.00)	3.5	(88.39)	0.83	97.46
3.5	(88.39)	4.0	(62.50)	4.01	96.63
4.0	(62.50)	4.5	(44.19)	8.02	92.62
4.5	(44.19)	5.0	(31.25)	10.91	84.61
5.0	(31.25)	5.5	(22.10)	11.52	73.7
5.5	(22.10)	6.0	(15.63)	10.42	62.18
6.0	(15.63)	6.5	(11.05)	8.84	51.76
6.5	(11.05)	7.0	(7.81)	7.55	42.91
7.0	(7.81)	7.5	(5.52)	6.64	35.36
7.5	(5.52)	8.0	(3.90)	5.97	28.73

Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
8.0	(3.90)	8.5	(2.76)	5.44	22.76
8.5	(2.76)	9.0	(1.95)	4.93	17.32
9.0	(1.95)	9.5	(1.38)	4.32	12.39
9.5	(1.38)	10.0	(0.98)	3.5	8.06
10.0	(0.98)	10.5	(0.69)	2.48	4.56
10.5	(0.69)	11.0	(0.49)	1.45	2.08
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-T3 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured:
Wednesday, August 12, 2009
12:06:22 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.40

D[4,3] = 35.78um = 4.8phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.45um = 8.67phi

D[v,0.5] = 13.6um = 6.2phi
D[v,0.84] = 43.51um = 4.52phi
D[v,0.95] = 74.89um = 3.74phi

Kurtosis = 90.39
Skewness = 8.94
Standard Deviation = 123.89 um = 3.01phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .86 phi (Platykurtic)

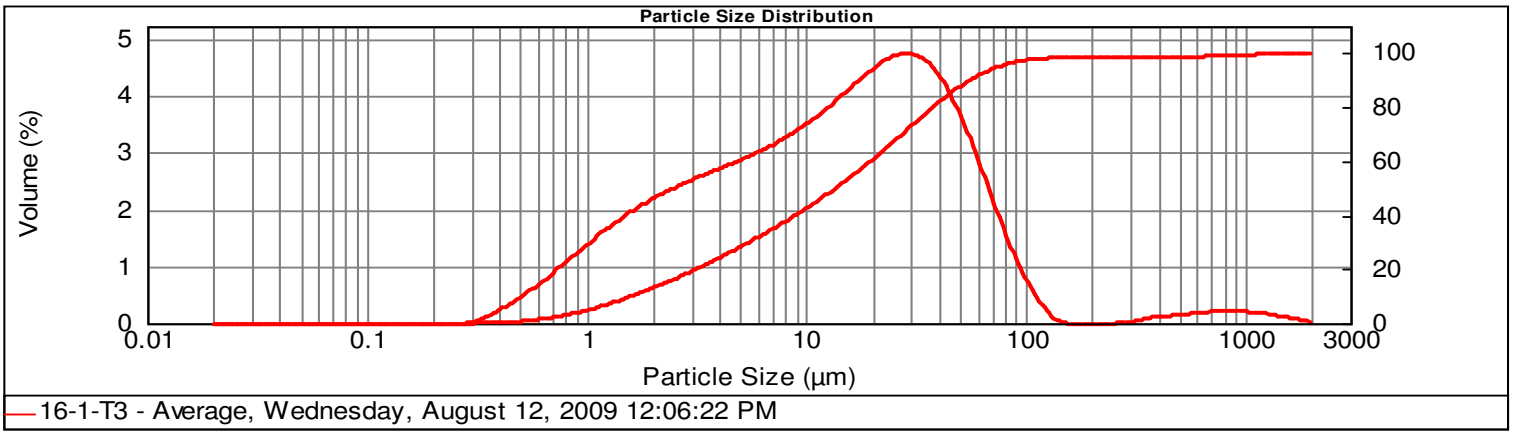
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 12.98
% Fine Silt (2-3.9 um) = 10.74

d (0.1) : 1.607 **um**
d (0.5) : 13.595 **d (0.9) : 55.646**

Wentworth
% Clay (0-3.9 um) = 23.71
% Silt (3.91-31 um) = 50.27
% Coarse Silt (31 - 62.5 um) = 18.28
% Very Fine sand (62.5 - 125 um) = 5.88

% Fine sand (125-250 um) = .09
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = .87
% Very Coarse sand (1000 - 2000 um) = .57



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.18	100
-0.5	(1414.21)	0.0	(1000.00)	0.39	99.82
0.0	(1000.00)	0.5	(707.10)	0.47	99.43
0.5	(707.10)	1.0	(500.00)	0.4	98.96
1.0	(500.00)	1.5	(353.55)	0.26	98.56
1.5	(353.55)	2.0	(250.00)	0.06	98.29
2.0	(250.00)	2.5	(176.78)	0	98.23
2.5	(176.78)	3.0	(125.00)	0.09	98.23
3.0	(125.00)	3.5	(88.39)	1.48	98.15
3.5	(88.39)	4.0	(62.50)	4.4	96.67
4.0	(62.50)	4.5	(44.19)	7.84	92.27
4.5	(44.19)	5.0	(31.25)	10.19	84.42
5.0	(31.25)	5.5	(22.10)	10.68	74.23
5.5	(22.10)	6.0	(15.63)	9.9	63.55
6.0	(15.63)	6.5	(11.05)	8.76	53.65
6.5	(11.05)	7.0	(7.81)	7.77	44.89
7.0	(7.81)	7.5	(5.52)	6.99	37.12
7.5	(5.52)	8.0	(3.90)	6.39	30.13

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.85	23.74
8.5	(2.76)	9.0	(1.95)	5.25	17.9
9.0	(1.95)	9.5	(1.38)	4.51	12.64
9.5	(1.38)	10.0	(0.98)	3.57	8.13
10.0	(0.98)	10.5	(0.69)	2.49	4.56
10.5	(0.69)	11.0	(0.49)	1.44	2.06
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-1-T4 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:11:28 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.82

D[4,3] = 29.32um = 5.09phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.71um = 8.53phi

D[v,0.5] = 15.53um = 6.01phi
D[v,0.84] = 45.79um = 4.45phi
D[v,0.95] = 74.58um = 3.75phi

Kurtosis = 125.5
Skewness = 10.23
Standard Deviation = 73.18 um = 3.77phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

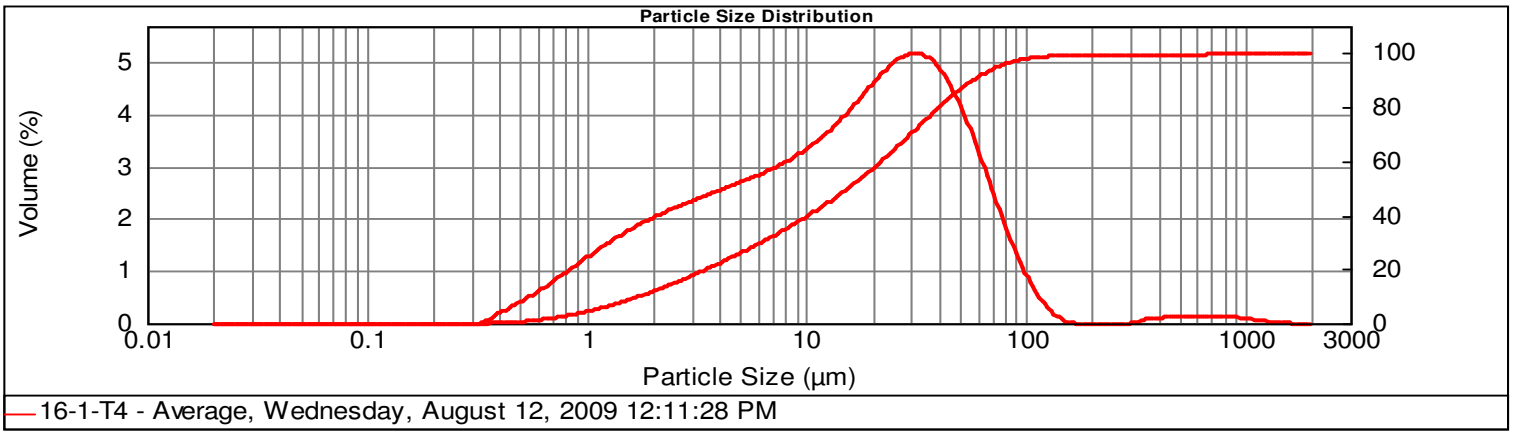
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 11.75
% Fine Silt (2-3.9 um) = 9.96

d (0.1) : 1.744 **um**
d (0.5) : 15.529 **d (0.9) : 57.338**

Wentworth
% Clay (0-3.9 um) = 21.71
% Silt (3.91-31 um) = 49.62
% Coarse Silt (31 - 62.5 um) = 20.57
% Very Fine sand (62.5 - 125 um) = 6.93

% Fine sand (125-250 um) = .19
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = .59
% Very Coarse sand (1000 - 2000 um) = .12



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.11	100
0.0	(1000.00)	0.5	(707.10)	0.28	99.88
0.5	(707.10)	1.0	(500.00)	0.32	99.61
1.0	(500.00)	1.5	(353.55)	0.24	99.29
1.5	(353.55)	2.0	(250.00)	0.03	99.05
2.0	(250.00)	2.5	(176.78)	0	99.01
2.5	(176.78)	3.0	(125.00)	0.19	99.01
3.0	(125.00)	3.5	(88.39)	1.8	98.83
3.5	(88.39)	4.0	(62.50)	5.13	97.02
4.0	(62.50)	4.5	(44.19)	8.96	91.89
4.5	(44.19)	5.0	(31.25)	11.34	82.94
5.0	(31.25)	5.5	(22.10)	11.41	71.6
5.5	(22.10)	6.0	(15.63)	10.03	60.19
6.0	(15.63)	6.5	(11.05)	8.49	50.16
6.5	(11.05)	7.0	(7.81)	7.36	41.68
7.0	(7.81)	7.5	(5.52)	6.59	34.32
7.5	(5.52)	8.0	(3.90)	5.99	27.73
8.0	(3.90)	8.5	(2.76)	5.44	21.74
8.5	(2.76)	9.0	(1.95)	4.85	16.29
9.0	(1.95)	9.5	(1.38)	4.14	11.44
9.5	(1.38)	10.0	(0.98)	3.26	7.3
10.0	(0.98)	10.5	(0.69)	2.27	4.04
10.5	(0.69)	11.0	(0.49)	1.29	1.77
11.0	(0.49)	11.5	(0.35)	0.48	0.48
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:46:00 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.78

D[4,3] = 32.69um = 4.94phi
D[v,0.05] = 1.11um = 9.82phi
D[v,0.16] = 2.83um = 8.46phi

D[v,0.5] = 16.49um = 5.92phi
D[v,0.84] = 51um = 4.29phi
D[v,0.95] = 91.58um = 3.45phi

Kurtosis = 80.3
Skewness = 7.94
Standard Deviation = 70.23 um = 3.83phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

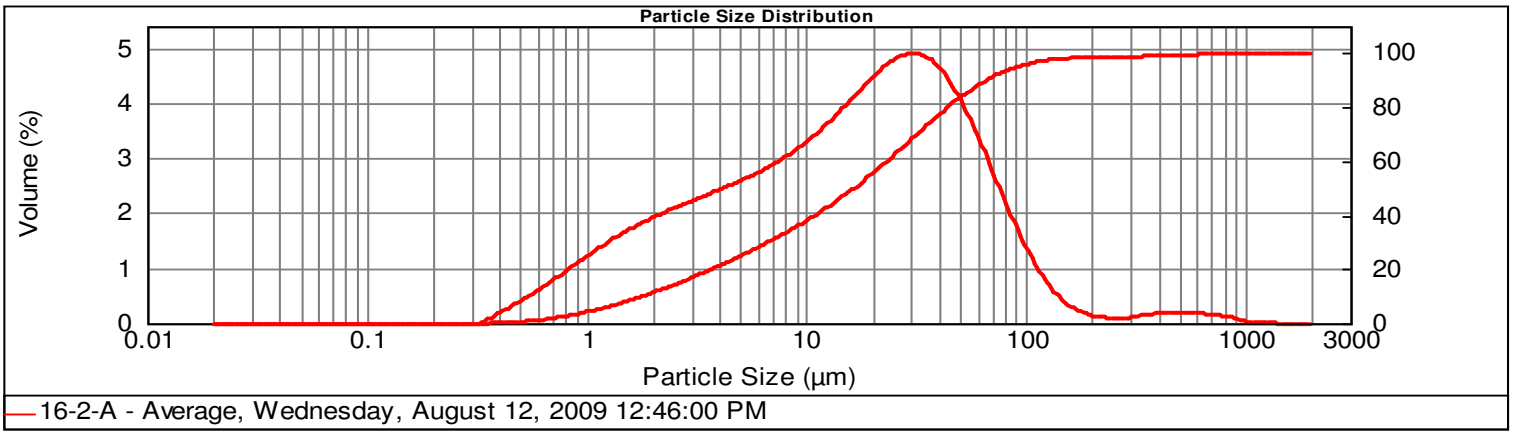
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.23 phi (Silt)

USGS
% Clay (0-2 um) = 11.34
% Fine Silt (2-3.9 um) = 9.45

d (0.1) : 1.793 **um**
d (0.5) : 16.489 **d (0.9) : 66.118**

Wentworth
% Clay (0-3.9 um) = 20.79
% Silt (3.91-31 um) = 48.23
% Coarse Silt (31 - 62.5 um) = 19.83
% Very Fine sand (62.5 - 125 um) = 8.55

% Fine sand (125-250 um) = 1.25
% Medium sand (250-500 um) = .66
% Coarse sand (500-1000 um) = .66
% Very Coarse sand (1000 - 2000 um) = .03



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.03	100
0.0	(1000.00)	0.5	(707.10)	0.24	99.97
0.5	(707.10)	1.0	(500.00)	0.42	99.73
1.0	(500.00)	1.5	(353.55)	0.41	99.31
1.5	(353.55)	2.0	(250.00)	0.25	98.9
2.0	(250.00)	2.5	(176.78)	0.29	98.65
2.5	(176.78)	3.0	(125.00)	0.96	98.35
3.0	(125.00)	3.5	(88.39)	2.81	97.4
3.5	(88.39)	4.0	(62.50)	5.74	94.59
4.0	(62.50)	4.5	(44.19)	8.82	88.85
4.5	(44.19)	5.0	(31.25)	10.75	80.03
5.0	(31.25)	5.5	(22.10)	10.9	69.28
5.5	(22.10)	6.0	(15.63)	9.8	58.37
6.0	(15.63)	6.5	(11.05)	8.41	48.57
6.5	(11.05)	7.0	(7.81)	7.24	40.16
7.0	(7.81)	7.5	(5.52)	6.38	32.91
7.5	(5.52)	8.0	(3.90)	5.72	26.54
8.0	(3.90)	8.5	(2.76)	5.17	20.82
8.5	(2.76)	9.0	(1.95)	4.61	15.65
9.0	(1.95)	9.5	(1.38)	3.95	11.04
9.5	(1.38)	10.0	(0.98)	3.14	7.09
10.0	(0.98)	10.5	(0.69)	2.2	3.95
10.5	(0.69)	11.0	(0.49)	1.27	1.75
11.0	(0.49)	11.5	(0.35)	0.48	0.48
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:50:41 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.59

D[4,3] = 37.5um = 4.74phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.8um = 8.48phi

D[v,0.5] = 17.28um = 5.86phi
D[v,0.84] = 52.6um = 4.25phi
D[v,0.95] = 89.38um = 3.48phi

Kurtosis = 93.45
Skewness = 8.89
Standard Deviation = 104.58 um = 3.26phi

Inclusive SD (Sorting Coeff.) = 2.02 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

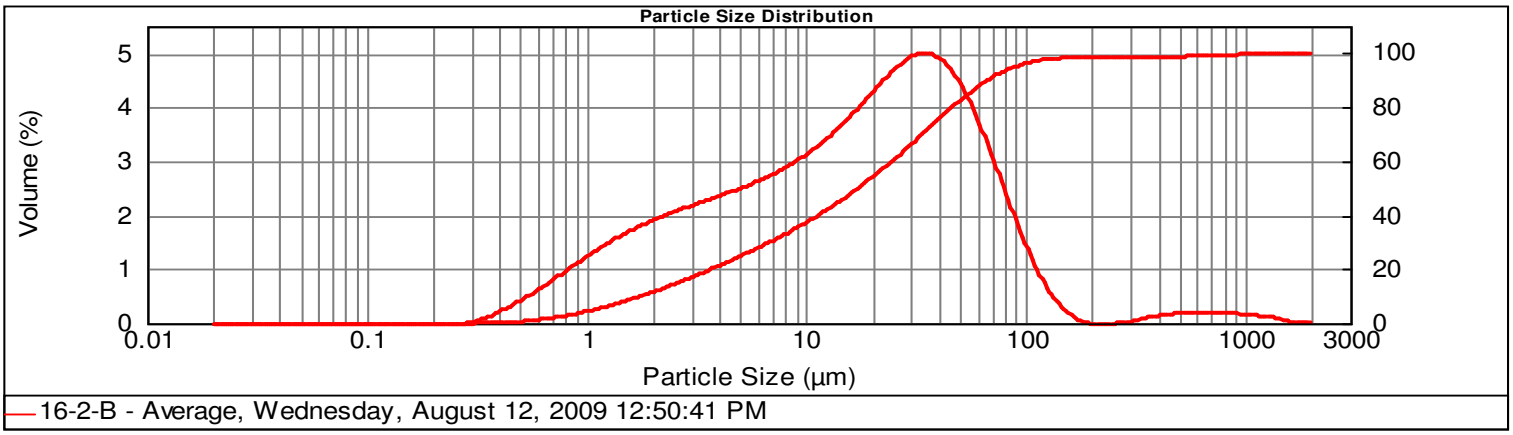
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.2 phi (Silt)

USGS
% Clay (0-2 um) = 11.57
% Fine Silt (2-3.9 um) = 9.3

d (0.1) : 1.758 **um**
d (0.5) : 17.275 **d (0.9) : 66.820**

Wentworth
% Clay (0-3.9 um) = 20.87
% Silt (3.91-31 um) = 46.47
% Coarse Silt (31 - 62.5 um) = 21.14
% Very Fine sand (62.5 - 125 um) = 9.24

% Fine sand (125-250 um) = .65
% Medium sand (250-500 um) = .4
% Coarse sand (500-1000 um) = .87
% Very Coarse sand (1000 - 2000 um) = .35



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.29	99.94
0.0	(1000.00)	0.5	(707.10)	0.42	99.65
0.5	(707.10)	1.0	(500.00)	0.45	99.23
1.0	(500.00)	1.5	(353.55)	0.33	98.78
1.5	(353.55)	2.0	(250.00)	0.07	98.44
2.0	(250.00)	2.5	(176.78)	0	98.37
2.5	(176.78)	3.0	(125.00)	0.65	98.37
3.0	(125.00)	3.5	(88.39)	2.87	97.72
3.5	(88.39)	4.0	(62.50)	6.37	94.86
4.0	(62.50)	4.5	(44.19)	9.67	88.48
4.5	(44.19)	5.0	(31.25)	11.22	78.82
5.0	(31.25)	5.5	(22.10)	10.79	67.6
5.5	(22.10)	6.0	(15.63)	9.37	56.82
6.0	(15.63)	6.5	(11.05)	7.97	47.44
6.5	(11.05)	7.0	(7.81)	6.9	39.47
7.0	(7.81)	7.5	(5.52)	6.13	32.57
7.5	(5.52)	8.0	(3.90)	5.55	26.44
8.0	(3.90)	8.5	(2.76)	5.06	20.89
8.5	(2.76)	9.0	(1.95)	4.56	15.83
9.0	(1.95)	9.5	(1.38)	3.95	11.27
9.5	(1.38)	10.0	(0.98)	3.17	7.32
10.0	(0.98)	10.5	(0.69)	2.25	4.15
10.5	(0.69)	11.0	(0.49)	1.32	1.9
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:01:15 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.71

D[4,3] = 40.1um = 4.64phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.75um = 8.51phi

D[v,0.5] = 17.14um = 5.87phi
D[v,0.84] = 50.46um = 4.31phi
D[v,0.95] = 85.21um = 3.55phi

Kurtosis = 86.16
Skewness = 8.73
Standard Deviation = 128.4 um = 2.96phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

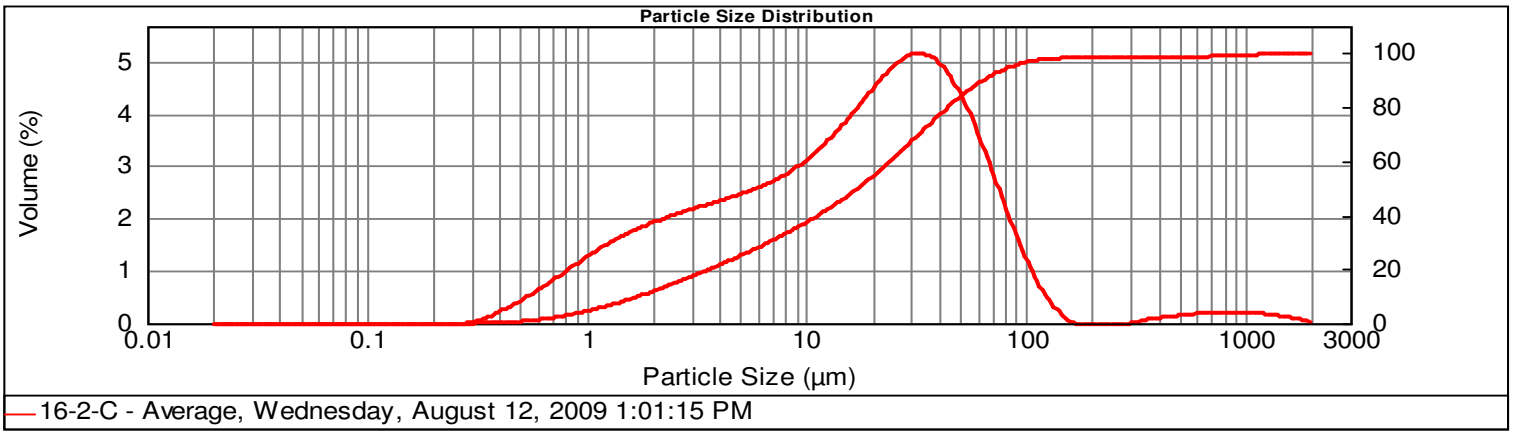
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.23 phi (Silt)

USGS
% Clay (0-2 um) = 11.8
% Fine Silt (2-3.9 um) = 9.3

d (0.1) : 1.727 **um**
d (0.5) : 17.141 **d (0.9) : 63.881**

Wentworth
% Clay (0-3.9 um) = 21.09
% Silt (3.91-31 um) = 47.22
% Coarse Silt (31 - 62.5 um) = 21.2
% Very Fine sand (62.5 - 125 um) = 8.35

% Fine sand (125-250 um) = .35
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = .88
% Very Coarse sand (1000 - 2000 um) = .62



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.42	99.79
0.0	(1000.00)	0.5	(707.10)	0.48	99.38
0.5	(707.10)	1.0	(500.00)	0.4	98.9
1.0	(500.00)	1.5	(353.55)	0.25	98.49
1.5	(353.55)	2.0	(250.00)	0.03	98.24
2.0	(250.00)	2.5	(176.78)	0	98.21
2.5	(176.78)	3.0	(125.00)	0.35	98.21
3.0	(125.00)	3.5	(88.39)	2.42	97.86
3.5	(88.39)	4.0	(62.50)	5.93	95.44
4.0	(62.50)	4.5	(44.19)	9.49	89.51
4.5	(44.19)	5.0	(31.25)	11.45	80.03
5.0	(31.25)	5.5	(22.10)	11.25	68.58
5.5	(22.10)	6.0	(15.63)	9.76	57.32
6.0	(15.63)	6.5	(11.05)	8.11	47.56
6.5	(11.05)	7.0	(7.81)	6.85	39.46
7.0	(7.81)	7.5	(5.52)	6.02	32.61
7.5	(5.52)	8.0	(3.90)	5.48	26.59

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.04	21.12
8.5	(2.76)	9.0	(1.95)	4.58	16.08
9.0	(1.95)	9.5	(1.38)	4.01	11.5
9.5	(1.38)	10.0	(0.98)	3.24	7.49
10.0	(0.98)	10.5	(0.69)	2.31	4.25
10.5	(0.69)	11.0	(0.49)	1.35	1.94
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:19:04 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.98

D[4,3] = 35.76um = 4.81phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 14um = 6.16phi
D[v,0.84] = 42.51um = 4.56phi
D[v,0.95] = 72.02um = 3.8phi

Kurtosis = 94.02
Skewness = 9.2
Standard Deviation = 129.03 um = 2.95phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

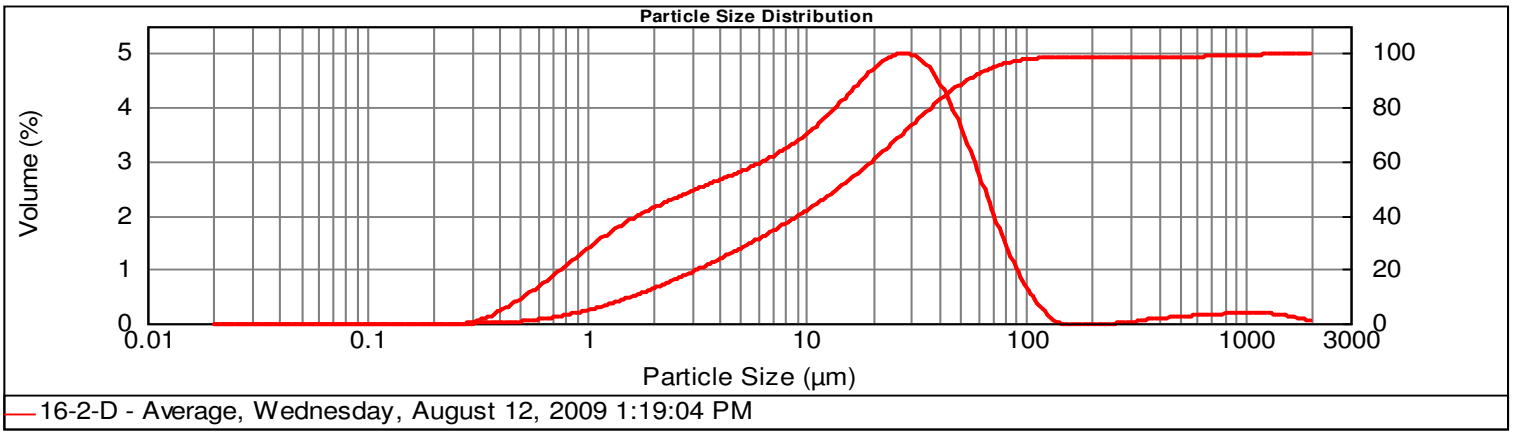
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 12.8
% Fine Silt (2-3.9 um) = 10.42

d (0.1) : 1.621 **um**
d (0.5) : 13.996 **d (0.9) : 53.961**

Wentworth
% Clay (0-3.9 um) = 23.21
% Silt (3.91-31 um) = 51.08
% Coarse Silt (31 - 62.5 um) = 18.58
% Very Fine sand (62.5 - 125 um) = 5.44

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .27
% Coarse sand (500-1000 um) = .73
% Very Coarse sand (1000 - 2000 um) = .66



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.24	100
-0.5	(1414.21)	0.0	(1000.00)	0.42	99.76
0.0	(1000.00)	0.5	(707.10)	0.41	99.34
0.5	(707.10)	1.0	(500.00)	0.32	98.94
1.0	(500.00)	1.5	(353.55)	0.22	98.61
1.5	(353.55)	2.0	(250.00)	0.05	98.39
2.0	(250.00)	2.5	(176.78)	0	98.34
2.5	(176.78)	3.0	(125.00)	0.04	98.34
3.0	(125.00)	3.5	(88.39)	1.28	98.31
3.5	(88.39)	4.0	(62.50)	4.15	97.02
4.0	(62.50)	4.5	(44.19)	7.79	92.87
4.5	(44.19)	5.0	(31.25)	10.52	85.08
5.0	(31.25)	5.5	(22.10)	11.24	74.56
5.5	(22.10)	6.0	(15.63)	10.33	63.32
6.0	(15.63)	6.5	(11.05)	8.92	52.99
6.5	(11.05)	7.0	(7.81)	7.72	44.06
7.0	(7.81)	7.5	(5.52)	6.87	36.34
7.5	(5.52)	8.0	(3.90)	6.23	29.47

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.67	23.24
8.5	(2.76)	9.0	(1.95)	5.1	17.57
9.0	(1.95)	9.5	(1.38)	4.41	12.47
9.5	(1.38)	10.0	(0.98)	3.53	8.06
10.0	(0.98)	10.5	(0.69)	2.48	4.53
10.5	(0.69)	11.0	(0.49)	1.44	2.05
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:26:05 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.91

D[4,3] = 20.53um = 5.61phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.34um = 8.74phi

D[v,0.5] = 12.57um = 6.31phi
D[v,0.84] = 39.64um = 4.66phi
D[v,0.95] = 64.87um = 3.95phi

Kurtosis = 63.64
Skewness = 5.04
Standard Deviation = 24.84 um = 5.33phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .85 phi (Platykurtic)

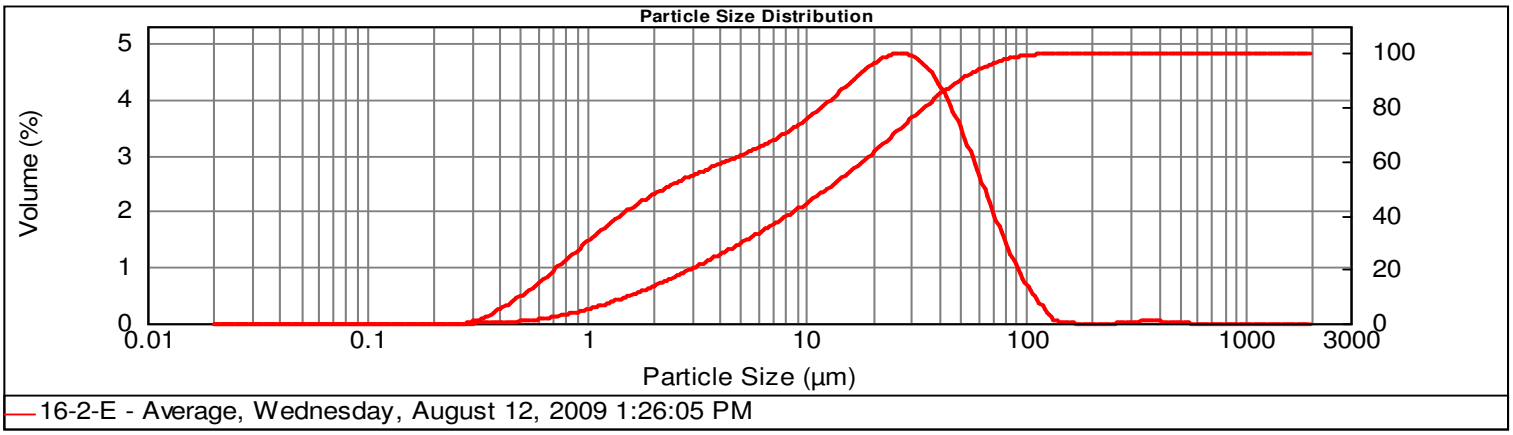
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.57 phi (Silt)

USGS
% Clay (0-2 um) = 13.59
% Fine Silt (2-3.9 um) = 11.19

d (0.1) : 1.550 **um**
d (0.5) : 12.569 **d (0.9) : 50.057**

Wentworth
% Clay (0-3.9 um) = 24.78
% Silt (3.91-31 um) = 51.88
% Coarse Silt (31 - 62.5 um) = 17.74
% Very Fine sand (62.5 - 125 um) = 5.41

% Fine sand (125-250 um) = .07
% Medium sand (250-500 um) = .12
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0.07	100
1.5	(353.55)	2.0	(250.00)	0.05	99.93
2.0	(250.00)	2.5	(176.78)	0	99.88
2.5	(176.78)	3.0	(125.00)	0.07	99.88
3.0	(125.00)	3.5	(88.39)	1.36	99.82
3.5	(88.39)	4.0	(62.50)	4.06	98.46
4.0	(62.50)	4.5	(44.19)	7.45	94.4
4.5	(44.19)	5.0	(31.25)	10.04	86.95
5.0	(31.25)	5.5	(22.10)	10.85	76.91
5.5	(22.10)	6.0	(15.63)	10.22	66.06
6.0	(15.63)	6.5	(11.05)	9.08	55.84
6.5	(11.05)	7.0	(7.81)	8.04	46.76
7.0	(7.81)	7.5	(5.52)	7.26	38.71
7.5	(5.52)	8.0	(3.90)	6.65	31.46

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.09	24.81
8.5	(2.76)	9.0	(1.95)	5.48	18.72
9.0	(1.95)	9.5	(1.38)	4.71	13.24
9.5	(1.38)	10.0	(0.98)	3.73	8.53
10.0	(0.98)	10.5	(0.69)	2.61	4.8
10.5	(0.69)	11.0	(0.49)	1.52	2.18
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:34:20 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.79

D[4,3] = 34.93um = 4.84phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.44um = 8.68phi

D[v,0.5] = 12.84um = 6.28phi
D[v,0.84] = 37.51um = 4.74phi
D[v,0.95] = 61.28um = 4.03phi

Kurtosis = 86.01
Skewness = 8.94
Standard Deviation = 139.61 um = 2.84phi

Inclusive SD (Sorting Coeff.) = 1.88 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

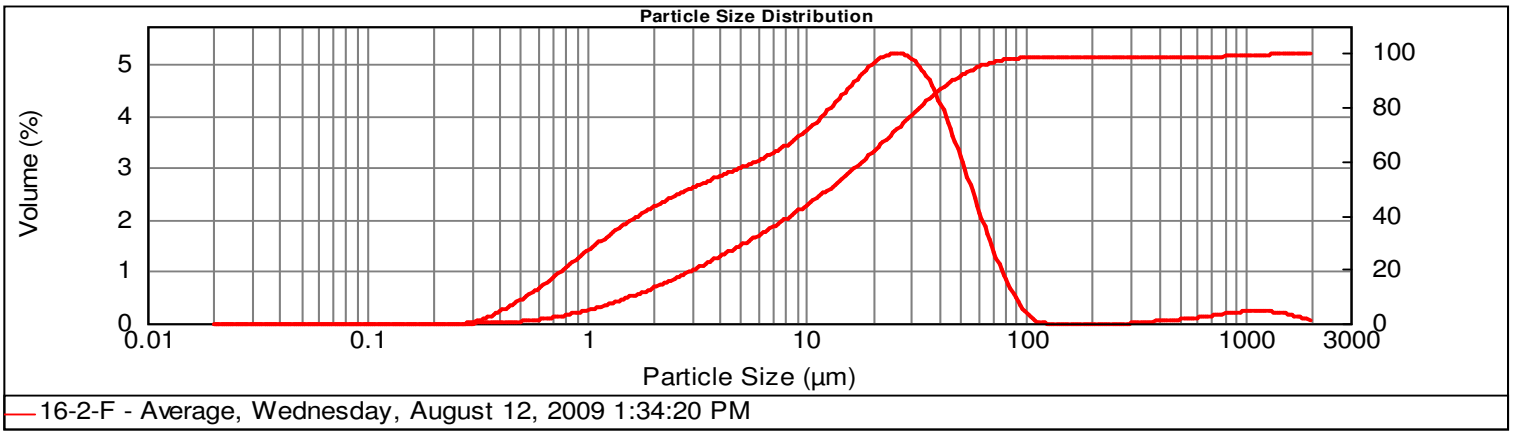
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.57 phi (Silt)

USGS
% Clay (0-2 um) = 12.96
% Fine Silt (2-3.9 um) = 11.04

d (0.1) : 1.614 **um**
d (0.5) : 12.836 **d (0.9) : 46.930**

Wentworth
% Clay (0-3.9 um) = 24
% Silt (3.91-31 um) = 53.97
% Coarse Silt (31 - 62.5 um) = 17.29
% Very Fine sand (62.5 - 125 um) = 3.12

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .11
% Coarse sand (500-1000 um) = .67
% Very Coarse sand (1000 - 2000 um) = .82



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.31	100
-0.5	(1414.21)	0.0	(1000.00)	0.51	99.69
0.0	(1000.00)	0.5	(707.10)	0.43	99.18
0.5	(707.10)	1.0	(500.00)	0.24	98.74
1.0	(500.00)	1.5	(353.55)	0.11	98.51
1.5	(353.55)	2.0	(250.00)	0.01	98.4
2.0	(250.00)	2.5	(176.78)	0	98.39
2.5	(176.78)	3.0	(125.00)	0	98.39
3.0	(125.00)	3.5	(88.39)	0.36	98.39
3.5	(88.39)	4.0	(62.50)	2.76	98.03
4.0	(62.50)	4.5	(44.19)	6.73	95.27
4.5	(44.19)	5.0	(31.25)	10.3	88.54
5.0	(31.25)	5.5	(22.10)	11.69	78.24
5.5	(22.10)	6.0	(15.63)	10.99	66.55
6.0	(15.63)	6.5	(11.05)	9.47	55.56
6.5	(11.05)	7.0	(7.81)	8.15	46.09
7.0	(7.81)	7.5	(5.52)	7.27	37.93
7.5	(5.52)	8.0	(3.90)	6.63	30.67
8.0	(3.90)	8.5	(2.76)	6.04	24.03
8.5	(2.76)	9.0	(1.95)	5.37	17.99
9.0	(1.95)	9.5	(1.38)	4.56	12.62
9.5	(1.38)	10.0	(0.98)	3.57	8.06
10.0	(0.98)	10.5	(0.69)	2.47	4.49
10.5	(0.69)	11.0	(0.49)	1.42	2.01
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:39:45 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.30

D[4,3] = 41.54um = 4.59phi
D[v,0.05] = 1.04um = 9.92phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 13.66um = 6.19phi
D[v,0.84] = 44.08um = 4.5phi
D[v,0.95] = 81.69um = 3.61phi

Kurtosis = 66.12
Skewness = 7.68
Standard Deviation = 144.18 um = 2.79phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

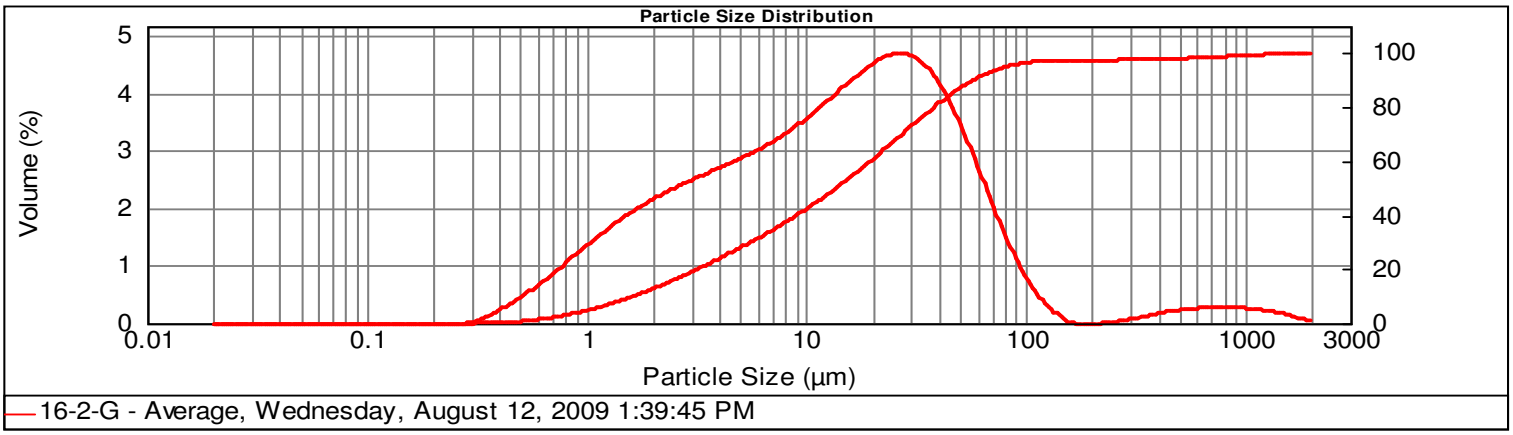
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 12.75
% Fine Silt (2-3.9 um) = 10.62

d (0.1) : 1.630 **um**
d (0.5) : 13.661 **d (0.9) : 57.543**

Wentworth
% Clay (0-3.9 um) = 23.37
% Silt (3.91-31 um) = 50.62
% Coarse Silt (31 - 62.5 um) = 17.49
% Very Fine sand (62.5 - 125 um) = 5.76

% Fine sand (125-250 um) = .22
% Medium sand (250-500 um) = .56
% Coarse sand (500-1000 um) = 1.21
% Very Coarse sand (1000 - 2000 um) = .77



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.25	100
-0.5	(1414.21)	0.0	(1000.00)	0.51	99.75
0.0	(1000.00)	0.5	(707.10)	0.62	99.23
0.5	(707.10)	1.0	(500.00)	0.58	98.61
1.0	(500.00)	1.5	(353.55)	0.41	98.03
1.5	(353.55)	2.0	(250.00)	0.16	97.62
2.0	(250.00)	2.5	(176.78)	0	97.46
2.5	(176.78)	3.0	(125.00)	0.21	97.46
3.0	(125.00)	3.5	(88.39)	1.56	97.25
3.5	(88.39)	4.0	(62.50)	4.2	95.68
4.0	(62.50)	4.5	(44.19)	7.41	91.48
4.5	(44.19)	5.0	(31.25)	9.83	84.07
5.0	(31.25)	5.5	(22.10)	10.6	74.23
5.5	(22.10)	6.0	(15.63)	10.03	63.63
6.0	(15.63)	6.5	(11.05)	8.94	53.6
6.5	(11.05)	7.0	(7.81)	7.88	44.66
7.0	(7.81)	7.5	(5.52)	7.02	36.79
7.5	(5.52)	8.0	(3.90)	6.37	29.76

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.8	23.4
8.5	(2.76)	9.0	(1.95)	5.18	17.6
9.0	(1.95)	9.5	(1.38)	4.44	12.42
9.5	(1.38)	10.0	(0.98)	3.5	7.98
10.0	(0.98)	10.5	(0.69)	2.45	4.48
10.5	(0.69)	11.0	(0.49)	1.42	2.03
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:45:39 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.99

D[4,3] = 37.25um = 4.75phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.4um = 8.7phi

D[v,0.5] = 13.12um = 6.25phi
D[v,0.84] = 42.03um = 4.57phi
D[v,0.95] = 74.33um = 3.75phi

Kurtosis = 80.55
Skewness = 8.5
Standard Deviation = 134.24 um = 2.9phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

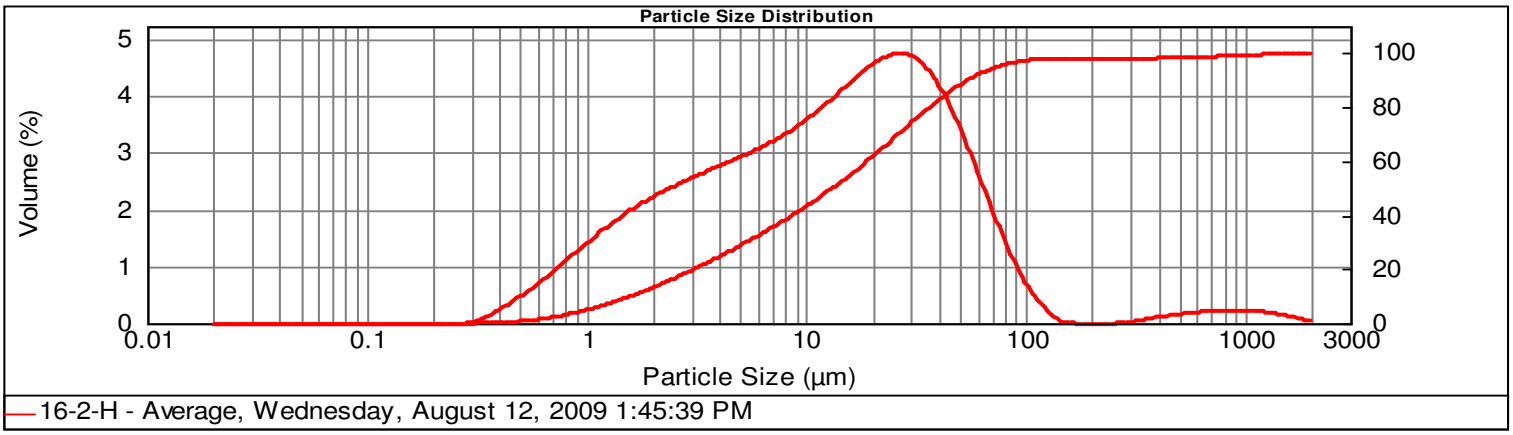
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.26
% Fine Silt (2-3.9 um) = 10.89

d (0.1) : 1.577 **um**
d (0.5) : 13.125 **d (0.9) : 54.194**

Wentworth
% Clay (0-3.9 um) = 24.15
% Silt (3.91-31 um) = 51.04
% Coarse Silt (31 - 62.5 um) = 17.42
% Very Fine sand (62.5 - 125 um) = 5.34

% Fine sand (125-250 um) = .1
% Medium sand (250-500 um) = .32
% Coarse sand (500-1000 um) = .94
% Very Coarse sand (1000 - 2000 um) = .69



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.23	100
-0.5	(1414.21)	0.0	(1000.00)	0.46	99.77
0.0	(1000.00)	0.5	(707.10)	0.52	99.31
0.5	(707.10)	1.0	(500.00)	0.43	98.79
1.0	(500.00)	1.5	(353.55)	0.27	98.37
1.5	(353.55)	2.0	(250.00)	0.05	98.1
2.0	(250.00)	2.5	(176.78)	0	98.05
2.5	(176.78)	3.0	(125.00)	0.1	98.05
3.0	(125.00)	3.5	(88.39)	1.35	97.94
3.5	(88.39)	4.0	(62.50)	3.98	96.59
4.0	(62.50)	4.5	(44.19)	7.3	92.61
4.5	(44.19)	5.0	(31.25)	9.87	85.31
5.0	(31.25)	5.5	(22.10)	10.7	75.44
5.5	(22.10)	6.0	(15.63)	10.09	64.73
6.0	(15.63)	6.5	(11.05)	8.95	54.65
6.5	(11.05)	7.0	(7.81)	7.9	45.7
7.0	(7.81)	7.5	(5.52)	7.11	37.8
7.5	(5.52)	8.0	(3.90)	6.5	30.68

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.94	24.18
8.5	(2.76)	9.0	(1.95)	5.32	18.24
9.0	(1.95)	9.5	(1.38)	4.58	12.92
9.5	(1.38)	10.0	(0.98)	3.64	8.34
10.0	(0.98)	10.5	(0.69)	2.56	4.7
10.5	(0.69)	11.0	(0.49)	1.49	2.14
11.0	(0.49)	11.5	(0.35)	0.6	0.65
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 16-2-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 1:53:58 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.47

D[4,3] = 39.43um = 4.66phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.41um = 8.7phi

D[v,0.5] = 13.13um = 6.25phi
D[v,0.84] = 40.47um = 4.63phi
D[v,0.95] = 69.9um = 3.84phi

Kurtosis = 70.51
Skewness = 8.09
Standard Deviation = 151.99 um = 2.72phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

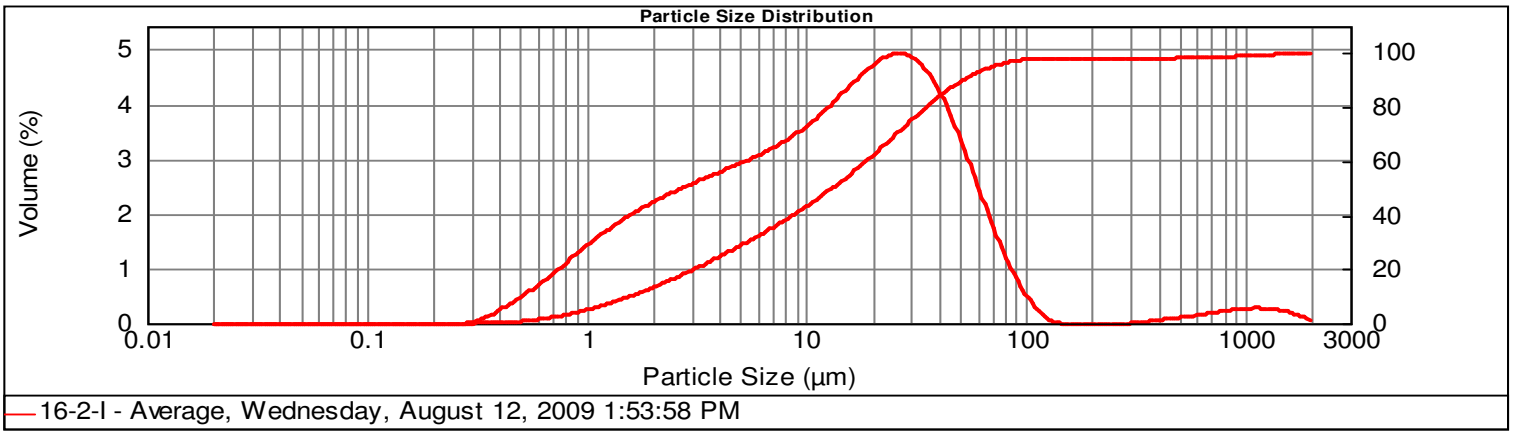
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.53 phi (Silt)

USGS
% Clay (0-2 um) = 13.22
% Fine Silt (2-3.9 um) = 10.83

d (0.1) : 1.581 **um**
d (0.5) : 13.128 **d (0.9) : 51.644**

Wentworth
% Clay (0-3.9 um) = 24.06
% Silt (3.91-31 um) = 51.96
% Coarse Silt (31 - 62.5 um) = 17.47
% Very Fine sand (62.5 - 125 um) = 4.53

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .16
% Coarse sand (500-1000 um) = .85
% Very Coarse sand (1000 - 2000 um) = .97



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.36	100
-0.5	(1414.21)	0.0	(1000.00)	0.61	99.64
0.0	(1000.00)	0.5	(707.10)	0.53	99.03
0.5	(707.10)	1.0	(500.00)	0.32	98.5
1.0	(500.00)	1.5	(353.55)	0.15	98.18
1.5	(353.55)	2.0	(250.00)	0.01	98.04
2.0	(250.00)	2.5	(176.78)	0	98.03
2.5	(176.78)	3.0	(125.00)	0.02	98.03
3.0	(125.00)	3.5	(88.39)	0.97	98.01
3.5	(88.39)	4.0	(62.50)	3.56	97.04
4.0	(62.50)	4.5	(44.19)	7.13	93.48
4.5	(44.19)	5.0	(31.25)	10.08	86.35
5.0	(31.25)	5.5	(22.10)	11.11	76.27
5.5	(22.10)	6.0	(15.63)	10.42	65.16
6.0	(15.63)	6.5	(11.05)	9.11	54.74
6.5	(11.05)	7.0	(7.81)	7.95	45.63
7.0	(7.81)	7.5	(5.52)	7.12	37.69
7.5	(5.52)	8.0	(3.90)	6.49	30.57

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.91	24.08
8.5	(2.76)	9.0	(1.95)	5.29	18.17
9.0	(1.95)	9.5	(1.38)	4.56	12.88
9.5	(1.38)	10.0	(0.98)	3.64	8.32
10.0	(0.98)	10.5	(0.69)	2.56	4.69
10.5	(0.69)	11.0	(0.49)	1.49	2.13
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:47:21 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.91

D[4,3] = 44.58um = 4.49phi
D[v,0.05] = 1.02um = 9.94phi
D[v,0.16] = 2.46um = 8.67phi

D[v,0.5] = 13.38um = 6.22phi
D[v,0.84] = 42.18um = 4.57phi
D[v,0.95] = 84.21um = 3.57phi

Kurtosis = 56.37
Skewness = 7.15
Standard Deviation = 158.63 um = 2.66phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

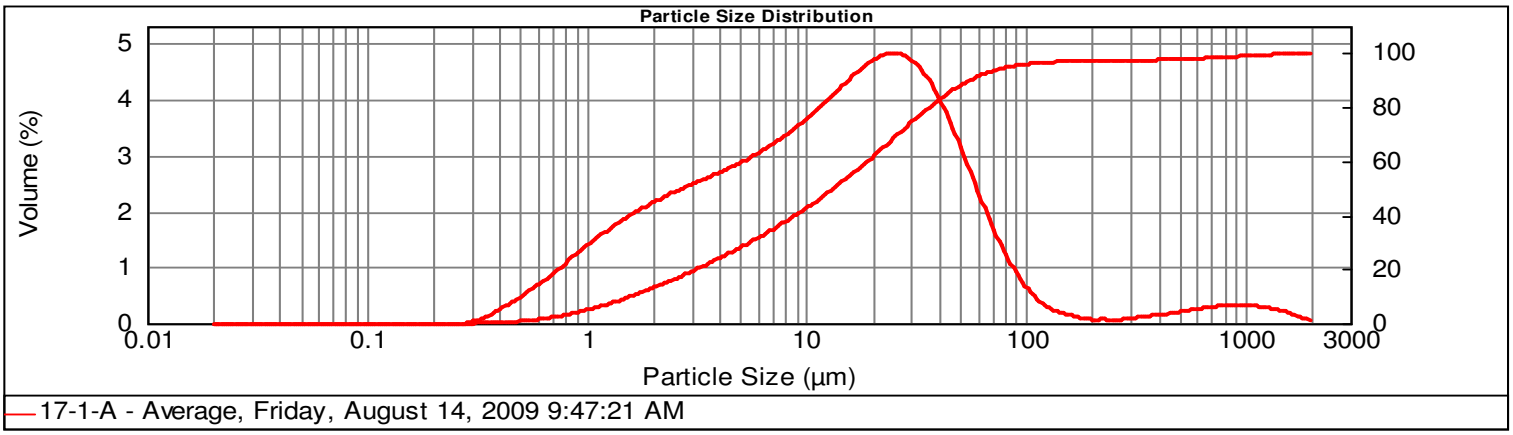
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 12.97
% Fine Silt (2-3.9 um) = 10.56

d (0.1) : 1.602 **um**
d (0.5) : 13.377 **d (0.9) : 55.708**

Wentworth
% Clay (0-3.9 um) = 23.54
% Silt (3.91-31 um) = 51.76
% Coarse Silt (31 - 62.5 um) = 16.54
% Very Fine sand (62.5 - 125 um) = 4.78

% Fine sand (125-250 um) = .56
% Medium sand (250-500 um) = .55
% Coarse sand (500-1000 um) = 1.28
% Very Coarse sand (1000 - 2000 um) = .98



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.33	100
-0.5	(1414.21)	0.0	(1000.00)	0.65	99.67
0.0	(1000.00)	0.5	(707.10)	0.72	99.02
0.5	(707.10)	1.0	(500.00)	0.56	98.3
1.0	(500.00)	1.5	(353.55)	0.36	97.74
1.5	(353.55)	2.0	(250.00)	0.19	97.38
2.0	(250.00)	2.5	(176.78)	0.16	97.19
2.5	(176.78)	3.0	(125.00)	0.41	97.03
3.0	(125.00)	3.5	(88.39)	1.3	96.62
3.5	(88.39)	4.0	(62.50)	3.48	95.32
4.0	(62.50)	4.5	(44.19)	6.69	91.84
4.5	(44.19)	5.0	(31.25)	9.6	85.15
5.0	(31.25)	5.5	(22.10)	10.85	75.55
5.5	(22.10)	6.0	(15.63)	10.41	64.7
6.0	(15.63)	6.5	(11.05)	9.22	54.29
6.5	(11.05)	7.0	(7.81)	8.05	45.07
7.0	(7.81)	7.5	(5.52)	7.1	37.02
7.5	(5.52)	8.0	(3.90)	6.36	29.92

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.76	23.56
8.5	(2.76)	9.0	(1.95)	5.16	17.8
9.0	(1.95)	9.5	(1.38)	4.45	12.64
9.5	(1.38)	10.0	(0.98)	3.55	8.19
10.0	(0.98)	10.5	(0.69)	2.51	4.64
10.5	(0.69)	11.0	(0.49)	1.47	2.13
11.0	(0.49)	11.5	(0.35)	0.6	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:52:16 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.90

D[4,3] = 82.1um = 3.61phi
D[v,0.05] = 1.11um = 9.82phi
D[v,0.16] = 2.96um = 8.4phi

D[v,0.5] = 21.2um = 5.56phi
D[v,0.84] = 72.55um = 3.78phi
D[v,0.95] = 497.38um = 1.01phi

Kurtosis = 23.5
Skewness = 4.63
Standard Deviation = 220.61 um = 2.18phi

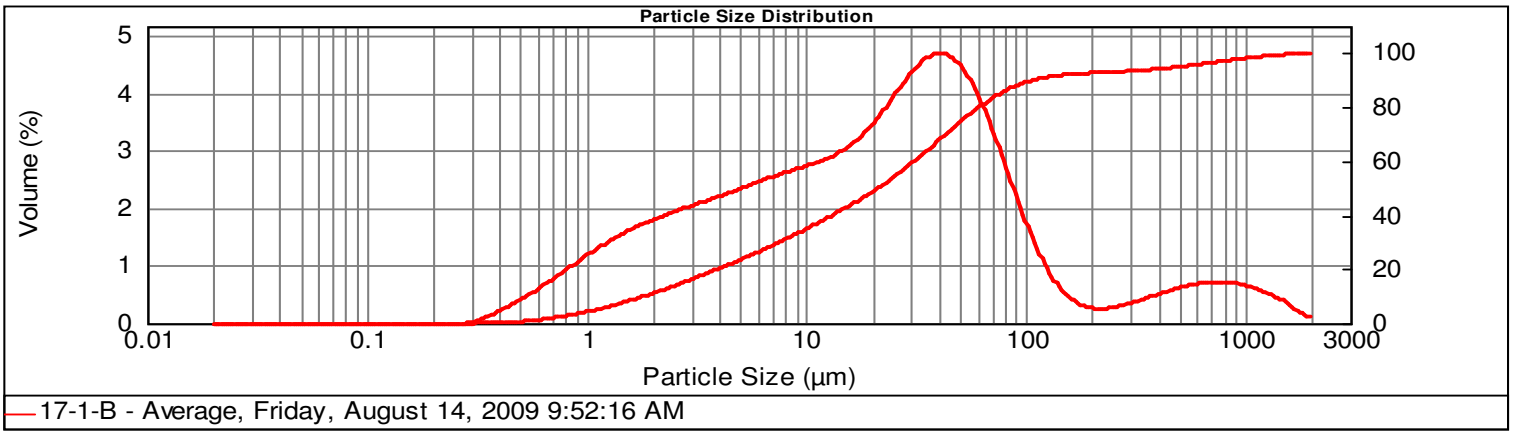
Inclusive SD (Sorting Coeff.) = 2.49 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.13 phi (Leptokurtic)

Inclusive Skewness = -0.1 (Near Symmetrical)
Inclusive Mean = 5.91 phi (Silt)

USGS
% Clay (0-2 um) = 11.06
% Fine Silt (2-3.9 um) = 8.73

d (0.1) : 1.825 **um**
d (0.5) : 21.197 **d (0.9) : 107.843**

Wentworth
% Clay (0-3.9 um) = 19.79
% Silt (3.91-31 um) = 40.16
% Coarse Silt (31 - 62.5 um) = 20.59
% Very Fine sand (62.5 - 125 um) = 10.6
% Fine sand (125-250 um) = 1.89
% Medium sand (250-500 um) = 1.99
% Coarse sand (500-1000 um) = 3.13
% Very Coarse sand (1000 - 2000 um) = 1.85



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.59	100
-0.5	(1414.21)	0.0	(1000.00)	1.26	99.41
0.0	(1000.00)	0.5	(707.10)	1.59	98.15
0.5	(707.10)	1.0	(500.00)	1.54	96.56
1.0	(500.00)	1.5	(353.55)	1.2	95.02
1.5	(353.55)	2.0	(250.00)	0.79	93.82
2.0	(250.00)	2.5	(176.78)	0.61	93.03
2.5	(176.78)	3.0	(125.00)	1.28	92.42
3.0	(125.00)	3.5	(88.39)	3.57	91.14
3.5	(88.39)	4.0	(62.50)	7.03	87.57
4.0	(62.50)	4.5	(44.19)	9.86	80.54
4.5	(44.19)	5.0	(31.25)	10.49	70.68
5.0	(31.25)	5.5	(22.10)	9.2	60.19
5.5	(22.10)	6.0	(15.63)	7.58	50.99
6.0	(15.63)	6.5	(11.05)	6.6	43.41
6.5	(11.05)	7.0	(7.81)	6.12	36.81
7.0	(7.81)	7.5	(5.52)	5.68	30.69
7.5	(5.52)	8.0	(3.90)	5.19	25.01
8.0	(3.90)	8.5	(2.76)	4.74	19.82
8.5	(2.76)	9.0	(1.95)	4.29	15.08
9.0	(1.95)	9.5	(1.38)	3.75	10.78
9.5	(1.38)	10.0	(0.98)	3.02	7.03
10.0	(0.98)	10.5	(0.69)	2.15	4.01
10.5	(0.69)	11.0	(0.49)	1.27	1.86
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:56:46 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.73

D[4,3] = 66.64um = 3.91phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.47um = 8.66phi

D[v,0.5] = 13.18um = 6.25phi
D[v,0.84] = 51.96um = 4.27phi
D[v,0.95] = 361.71um = 1.47phi

Kurtosis = 30.35
Skewness = 5.22
Standard Deviation = 202.67 um = 2.3phi

Inclusive SD (Sorting Coeff.) = 2.38 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.16 phi (Leptokurtic)

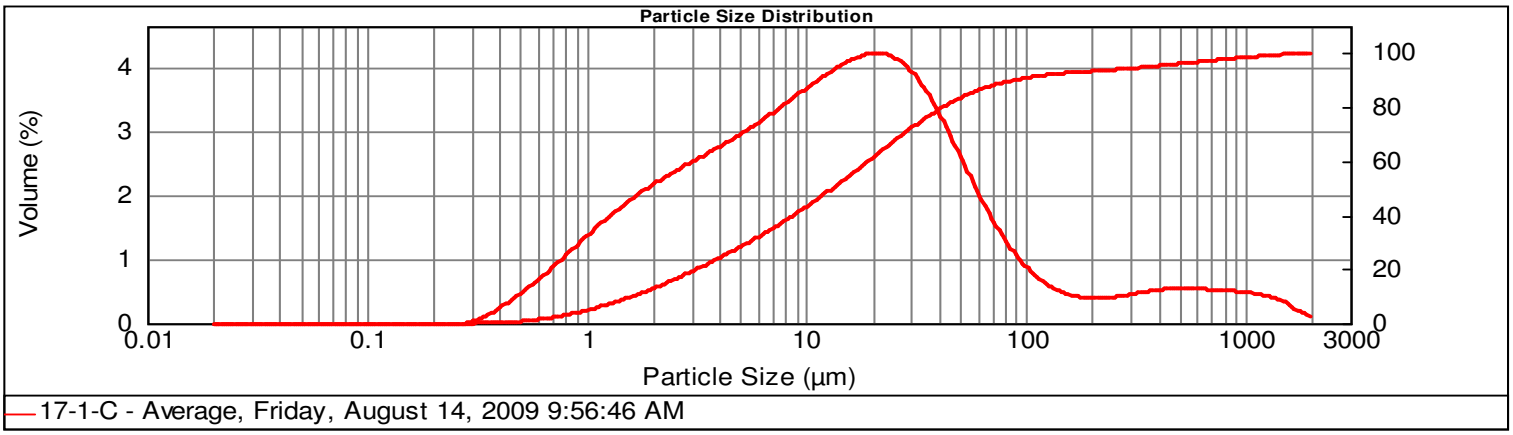
Inclusive Skewness = .02 (Near Symmetrical)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.86
% Fine Silt (2-3.9 um) = 10.71

d (0.1) : 1.617 **um**
d (0.5) : 13.183 **d (0.9) : 87.726**

Wentworth
% Clay (0-3.9 um) = 23.57
% Silt (3.91-31 um) = 49.44
% Coarse Silt (31 - 62.5 um) = 13.66
% Very Fine sand (62.5 - 125 um) = 5.24

% Fine sand (125-250 um) = 1.99
% Medium sand (250-500 um) = 2.21
% Coarse sand (500-1000 um) = 2.36
% Very Coarse sand (1000 - 2000 um) = 1.52



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.53	100
-0.5	(1414.21)	0.0	(1000.00)	0.99	99.47
0.0	(1000.00)	0.5	(707.10)	1.15	98.48
0.5	(707.10)	1.0	(500.00)	1.21	97.33
1.0	(500.00)	1.5	(353.55)	1.19	96.12
1.5	(353.55)	2.0	(250.00)	1.02	94.93
2.0	(250.00)	2.5	(176.78)	0.89	93.91
2.5	(176.78)	3.0	(125.00)	1.1	93.02
3.0	(125.00)	3.5	(88.39)	1.87	91.92
3.5	(88.39)	4.0	(62.50)	3.38	90.05
4.0	(62.50)	4.5	(44.19)	5.59	86.68
4.5	(44.19)	5.0	(31.25)	7.87	81.09
5.0	(31.25)	5.5	(22.10)	9.27	73.22
5.5	(22.10)	6.0	(15.63)	9.48	63.95
6.0	(15.63)	6.5	(11.05)	8.93	54.47
6.5	(11.05)	7.0	(7.81)	8.12	45.54
7.0	(7.81)	7.5	(5.52)	7.29	37.42
7.5	(5.52)	8.0	(3.90)	6.53	30.13

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.86	23.6
8.5	(2.76)	9.0	(1.95)	5.21	17.73
9.0	(1.95)	9.5	(1.38)	4.45	12.53
9.5	(1.38)	10.0	(0.98)	3.53	8.08
10.0	(0.98)	10.5	(0.69)	2.47	4.55
10.5	(0.69)	11.0	(0.49)	1.44	2.08
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:01:13 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.94

D[4,3] = 77.53um = 3.69phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.71um = 8.53phi

D[v,0.5] = 16.49um = 5.92phi
D[v,0.84] = 85.09um = 3.55phi
D[v,0.95] = 430.05um = 1.22phi

Kurtosis = 25.33
Skewness = 4.63
Standard Deviation = 194.86 um = 2.36phi

Inclusive SD (Sorting Coeff.) = 2.56 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.08 phi (Mesokurtic)

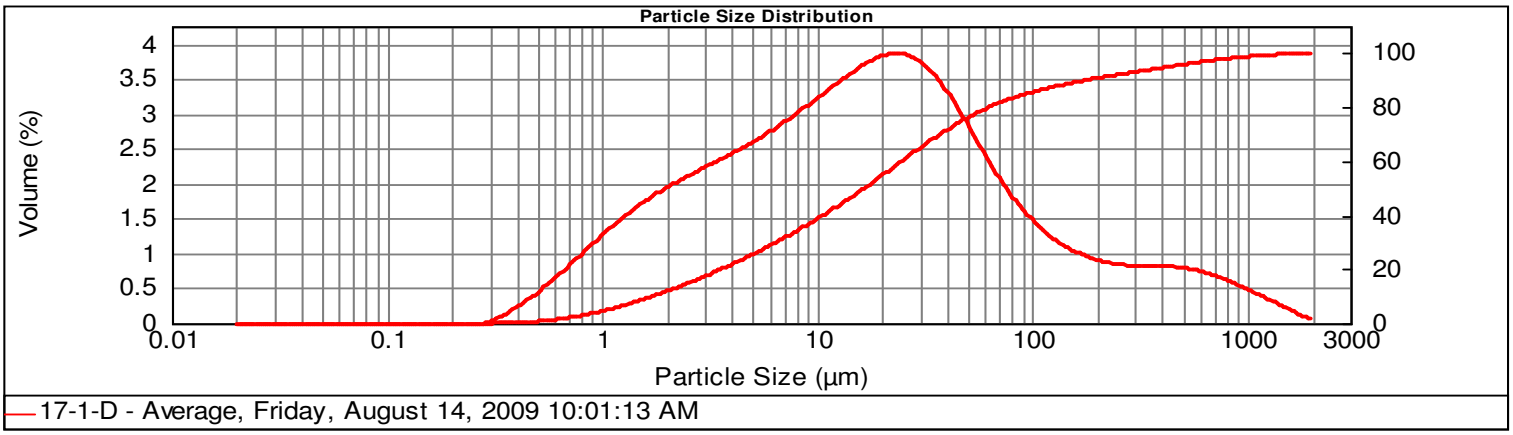
Inclusive Skewness = .02 (Near Symmetrical)
Inclusive Mean = 6 phi (Silt)

USGS
% Clay (0-2 um) = 11.91
% Fine Silt (2-3.9 um) = 9.54

d (0.1) : 1.714 **um**
d (0.5) : 16.487 **d (0.9) : 175.484**

Wentworth
% Clay (0-3.9 um) = 21.45
% Silt (3.91-31 um) = 44.32
% Coarse Silt (31 - 62.5 um) = 14.17
% Very Fine sand (62.5 - 125 um) = 7.68

% Fine sand (125-250 um) = 4.45
% Medium sand (250-500 um) = 3.72
% Coarse sand (500-1000 um) = 3.02
% Very Coarse sand (1000 - 2000 um) = 1.19



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.35	100
-0.5	(1414.21)	0.0	(1000.00)	0.84	99.65
0.0	(1000.00)	0.5	(707.10)	1.33	98.81
0.5	(707.10)	1.0	(500.00)	1.69	97.48
1.0	(500.00)	1.5	(353.55)	1.84	95.79
1.5	(353.55)	2.0	(250.00)	1.88	93.95
2.0	(250.00)	2.5	(176.78)	2.03	92.07
2.5	(176.78)	3.0	(125.00)	2.42	90.05
3.0	(125.00)	3.5	(88.39)	3.21	87.63
3.5	(88.39)	4.0	(62.50)	4.48	84.42
4.0	(62.50)	4.5	(44.19)	6.17	79.94
4.5	(44.19)	5.0	(31.25)	7.81	73.77
5.0	(31.25)	5.5	(22.10)	8.68	65.96
5.5	(22.10)	6.0	(15.63)	8.58	57.29
6.0	(15.63)	6.5	(11.05)	7.93	48.71
6.5	(11.05)	7.0	(7.81)	7.14	40.78
7.0	(7.81)	7.5	(5.52)	6.4	33.64
7.5	(5.52)	8.0	(3.90)	5.76	27.23

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.2	21.47
8.5	(2.76)	9.0	(1.95)	4.66	16.27
9.0	(1.95)	9.5	(1.38)	4.04	11.61
9.5	(1.38)	10.0	(0.98)	3.25	7.56
10.0	(0.98)	10.5	(0.69)	2.32	4.31
10.5	(0.69)	11.0	(0.49)	1.37	2
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-DM1 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:33:10 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.16

D[4,3] = 34.22um = 4.87phi
D[v,0.05] = .9um = 10.12phi
D[v,0.16] = 1.92um = 9.02phi

D[v,0.5] = 8.91um = 6.81phi
D[v,0.84] = 43.8um = 4.51phi
D[v,0.95] = 104.78um = 3.25phi

Kurtosis = 62.69
Skewness = 7.3
Standard Deviation = 103.11 um = 3.28phi

Inclusive SD (Sorting Coeff.) = 2.17 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

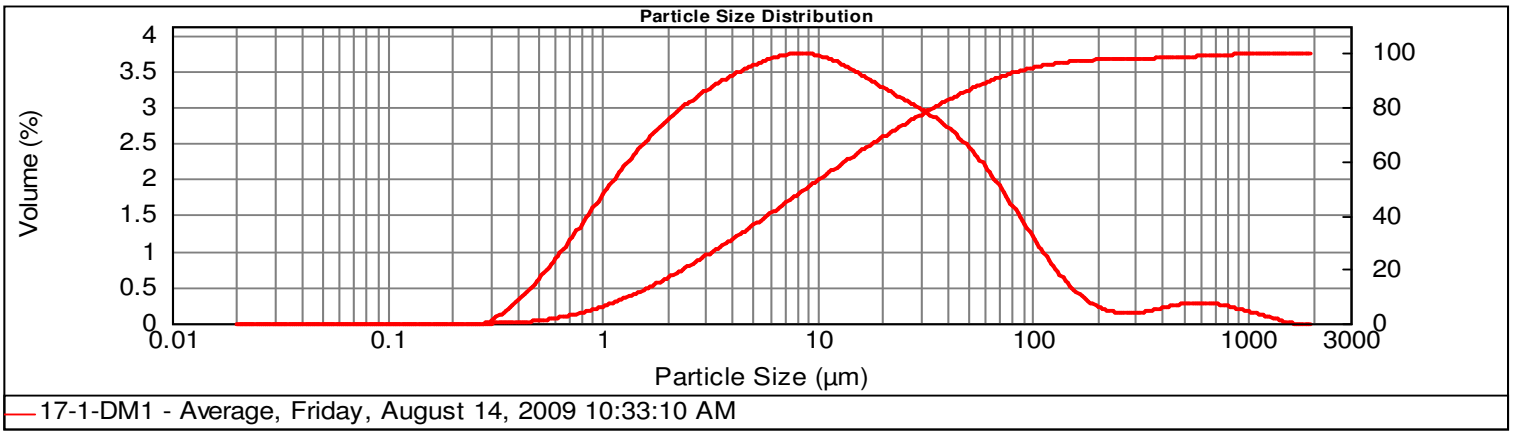
Inclusive Skewness = .03 (Near Symmetrical)
Inclusive Mean = 6.78 phi (Silt)

USGS
% Clay (0-2 um) = 16.71
% Fine Silt (2-3.9 um) = 13.7

d (0.1) : 1.338 **um**
d (0.5) : 8.907 **d (0.9) : 64.672**

Wentworth
% Clay (0-3.9 um) = 30.41
% Silt (3.91-31 um) = 47.27
% Coarse Silt (31 - 62.5 um) = 11.86
% Very Fine sand (62.5 - 125 um) = 6.55

% Fine sand (125-250 um) = 1.69
% Medium sand (250-500 um) = .84
% Coarse sand (500-1000 um) = 1.14
% Very Coarse sand (1000 - 2000 um) = .25



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.01	100
-0.5	(1414.21)	0.0	(1000.00)	0.24	99.99
0.0	(1000.00)	0.5	(707.10)	0.51	99.75
0.5	(707.10)	1.0	(500.00)	0.64	99.25
1.0	(500.00)	1.5	(353.55)	0.51	98.61
1.5	(353.55)	2.0	(250.00)	0.33	98.1
2.0	(250.00)	2.5	(176.78)	0.48	97.77
2.5	(176.78)	3.0	(125.00)	1.2	97.29
3.0	(125.00)	3.5	(88.39)	2.51	96.09
3.5	(88.39)	4.0	(62.50)	4.04	93.58
4.0	(62.50)	4.5	(44.19)	5.38	89.54
4.5	(44.19)	5.0	(31.25)	6.32	84.15
5.0	(31.25)	5.5	(22.10)	6.96	77.83
5.5	(22.10)	6.0	(15.63)	7.54	70.87
6.0	(15.63)	6.5	(11.05)	8.1	63.34
6.5	(11.05)	7.0	(7.81)	8.44	55.23
7.0	(7.81)	7.5	(5.52)	8.37	46.79
7.5	(5.52)	8.0	(3.90)	7.98	38.43
8.0	(3.90)	8.5	(2.76)	7.44	30.44
8.5	(2.76)	9.0	(1.95)	6.73	23
9.0	(1.95)	9.5	(1.38)	5.79	16.27
9.5	(1.38)	10.0	(0.98)	4.59	10.48
10.0	(0.98)	10.5	(0.69)	3.21	5.89
10.5	(0.69)	11.0	(0.49)	1.86	2.68
11.0	(0.49)	11.5	(0.35)	0.75	0.82
11.5	(0.35)	12.0	(0.24)	0.07	0.07
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-DM2 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:37:51 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.90

D[4,3] = 55.51um = 4.17phi
D[v,0.05] = 1.16um = 9.75phi
D[v,0.16] = 3.13um = 8.32phi

D[v,0.5] = 18.44um = 5.76phi
D[v,0.84] = 70.75um = 3.82phi
D[v,0.95] = 214.57um = 2.22phi

Kurtosis = 49.26
Skewness = 6.19
Standard Deviation = 136.92 um = 2.87phi

Inclusive SD (Sorting Coeff.) = 2.27 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.01 phi (Mesokurtic)

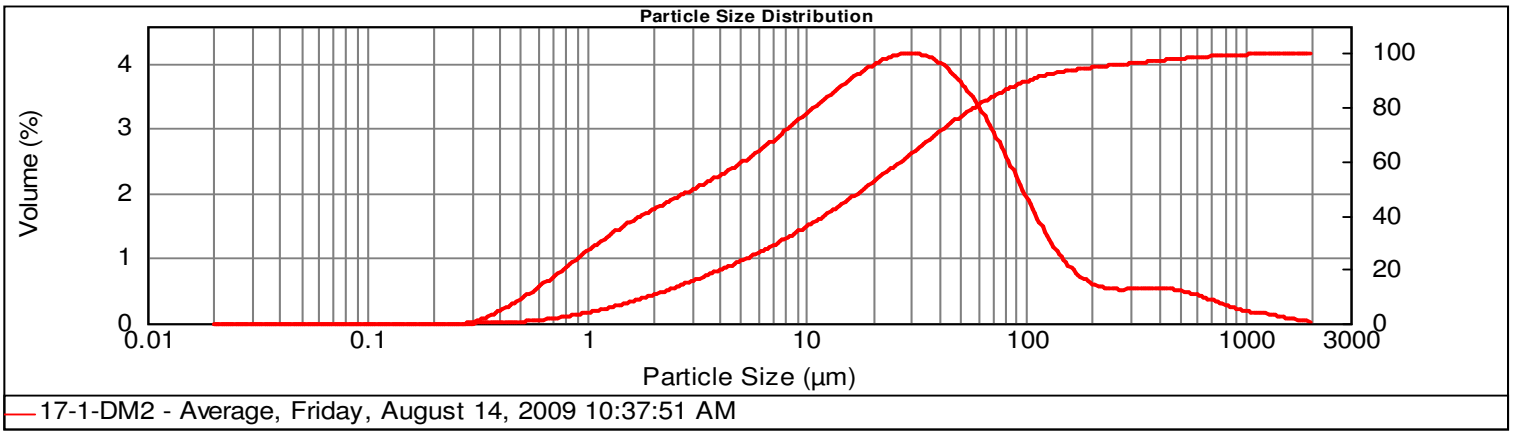
Inclusive Skewness = -0.1 (Near Symmetrical)
Inclusive Mean = 5.97 phi (Silt)

USGS
% Clay (0-2 um) = 10.39
% Fine Silt (2-3.9 um) = 8.71

d (0.1) : 1.932 **um**
d (0.5) : 18.442 **d (0.9) : 103.516**

Wentworth
% Clay (0-3.9 um) = 19.11
% Silt (3.91-31 um) = 44.72
% Coarse Silt (31 - 62.5 um) = 17.64
% Very Fine sand (62.5 - 125 um) = 10.49

% Fine sand (125-250 um) = 3.58
% Medium sand (250-500 um) = 2.39
% Coarse sand (500-1000 um) = 1.58
% Very Coarse sand (1000 - 2000 um) = .48



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.14	100
-0.5	(1414.21)	0.0	(1000.00)	0.34	99.86
0.0	(1000.00)	0.5	(707.10)	0.6	99.52
0.5	(707.10)	1.0	(500.00)	0.98	98.92
1.0	(500.00)	1.5	(353.55)	1.2	97.93
1.5	(353.55)	2.0	(250.00)	1.19	96.73
2.0	(250.00)	2.5	(176.78)	1.34	95.54
2.5	(176.78)	3.0	(125.00)	2.24	94.2
3.0	(125.00)	3.5	(88.39)	4.11	91.96
3.5	(88.39)	4.0	(62.50)	6.37	87.85
4.0	(62.50)	4.5	(44.19)	8.21	81.47
4.5	(44.19)	5.0	(31.25)	9.22	73.27
5.0	(31.25)	5.5	(22.10)	9.35	64.05
5.5	(22.10)	6.0	(15.63)	8.84	54.7
6.0	(15.63)	6.5	(11.05)	8.02	45.86
6.5	(11.05)	7.0	(7.81)	7.1	37.84
7.0	(7.81)	7.5	(5.52)	6.19	30.74
7.5	(5.52)	8.0	(3.90)	5.42	24.55
8.0	(3.90)	8.5	(2.76)	4.79	19.13
8.5	(2.76)	9.0	(1.95)	4.22	14.34
9.0	(1.95)	9.5	(1.38)	3.59	10.12
9.5	(1.38)	10.0	(0.98)	2.85	6.53
10.0	(0.98)	10.5	(0.69)	2	3.68
10.5	(0.69)	11.0	(0.49)	1.17	1.68
11.0	(0.49)	11.5	(0.35)	0.47	0.51
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:05:48 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.11

D[4,3] = 31.15um = 5phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.66um = 8.56phi

D[v,0.5] = 14.77um = 6.08phi
D[v,0.84] = 47.24um = 4.4phi
D[v,0.95] = 97.07um = 3.36phi

Kurtosis = 52.82
Skewness = 6.36
Standard Deviation = 62.4 um = 4phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .94 phi (Mesokurtic)

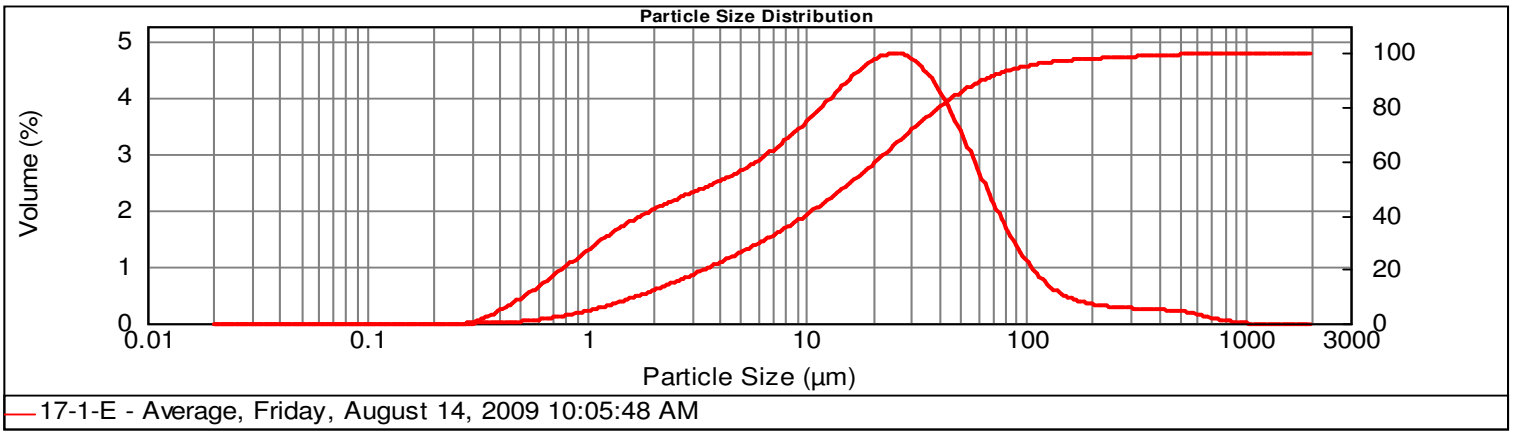
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.35 phi (Silt)

USGS
% Clay (0-2 um) = 12.08
% Fine Silt (2-3.9 um) = 9.84

d (0.1) : 1.697 **um**
d (0.5) : 14.769 **d (0.9) : 63.634**

Wentworth
% Clay (0-3.9 um) = 21.91
% Silt (3.91-31 um) = 50.47
% Coarse Silt (31 - 62.5 um) = 17.31
% Very Fine sand (62.5 - 125 um) = 6.81

% Fine sand (125-250 um) = 1.89
% Medium sand (250-500 um) = 1.14
% Coarse sand (500-1000 um) = .45
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0.09	100
0.5	(707.10)	1.0	(500.00)	0.36	99.91
1.0	(500.00)	1.5	(353.55)	0.53	99.55
1.5	(353.55)	2.0	(250.00)	0.61	99.02
2.0	(250.00)	2.5	(176.78)	0.74	98.41
2.5	(176.78)	3.0	(125.00)	1.15	97.66
3.0	(125.00)	3.5	(88.39)	2.31	96.51
3.5	(88.39)	4.0	(62.50)	4.5	94.2
4.0	(62.50)	4.5	(44.19)	7.32	89.7
4.5	(44.19)	5.0	(31.25)	9.75	82.38
5.0	(31.25)	5.5	(22.10)	10.76	72.63
5.5	(22.10)	6.0	(15.63)	10.3	61.87
6.0	(15.63)	6.5	(11.05)	9.1	51.57
6.5	(11.05)	7.0	(7.81)	7.82	42.47
7.0	(7.81)	7.5	(5.52)	6.75	34.65
7.5	(5.52)	8.0	(3.90)	5.96	27.9

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.36	21.94
8.5	(2.76)	9.0	(1.95)	4.81	16.58
9.0	(1.95)	9.5	(1.38)	4.15	11.77
9.5	(1.38)	10.0	(0.98)	3.31	7.62
10.0	(0.98)	10.5	(0.69)	2.33	4.31
10.5	(0.69)	11.0	(0.49)	1.37	1.98
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:10:22 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.96

D[4,3] = 23.63um = 5.4phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 14.64um = 6.09phi
D[v,0.84] = 43.92um = 4.51phi
D[v,0.95] = 72.6um = 3.78phi

Kurtosis = 115.52
Skewness = 8.02
Standard Deviation = 33.16 um = 4.91phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

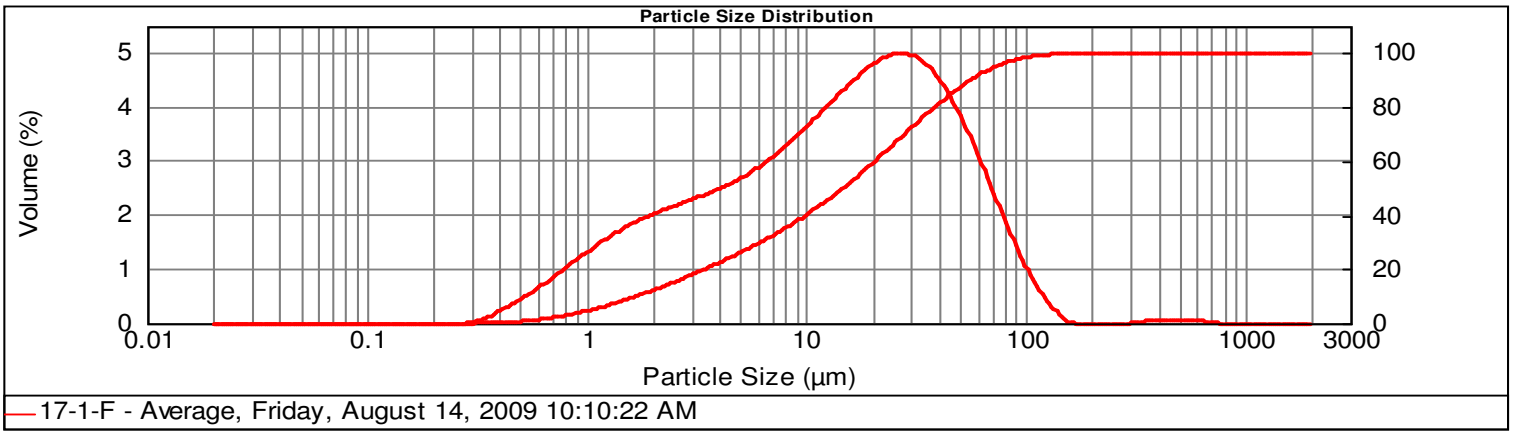
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.21
% Fine Silt (2-3.9 um) = 9.75

d (0.1) : 1.680 **um**
d (0.5) : 14.639 **d (0.9) : 55.663**

Wentworth
% Clay (0-3.9 um) = 21.97
% Silt (3.91-31 um) = 51.41
% Coarse Silt (31 - 62.5 um) = 19.04
% Very Fine sand (62.5 - 125 um) = 7.06

% Fine sand (125-250 um) = .28
% Medium sand (250-500 um) = .14
% Coarse sand (500-1000 um) = .1
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0.1	100
1.0	(500.00)	1.5	(353.55)	0.12	99.9
1.5	(353.55)	2.0	(250.00)	0.02	99.77
2.0	(250.00)	2.5	(176.78)	0	99.76
2.5	(176.78)	3.0	(125.00)	0.28	99.76
3.0	(125.00)	3.5	(88.39)	2.04	99.48
3.5	(88.39)	4.0	(62.50)	5.02	97.44
4.0	(62.50)	4.5	(44.19)	8.25	92.42
4.5	(44.19)	5.0	(31.25)	10.54	84.17
5.0	(31.25)	5.5	(22.10)	11.22	73.63
5.5	(22.10)	6.0	(15.63)	10.56	62.41
6.0	(15.63)	6.5	(11.05)	9.28	51.85
6.5	(11.05)	7.0	(7.81)	7.93	42.57
7.0	(7.81)	7.5	(5.52)	6.76	34.64
7.5	(5.52)	8.0	(3.90)	5.89	27.88
8.0	(3.90)	8.5	(2.76)	5.3	21.99
8.5	(2.76)	9.0	(1.95)	4.79	16.69
9.0	(1.95)	9.5	(1.38)	4.18	11.9
9.5	(1.38)	10.0	(0.98)	3.37	7.72
10.0	(0.98)	10.5	(0.69)	2.38	4.36
10.5	(0.69)	11.0	(0.49)	1.38	1.98
11.0	(0.49)	11.5	(0.35)	0.55	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:14:53 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.53

D[4,3] = 24.33um = 5.36phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.62um = 8.58phi

D[v,0.5] = 14.51um = 6.11phi
D[v,0.84] = 43.27um = 4.53phi
D[v,0.95] = 72.49um = 3.79phi

Kurtosis = 111.08
Skewness = 8.67
Standard Deviation = 39.74 um = 4.65phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

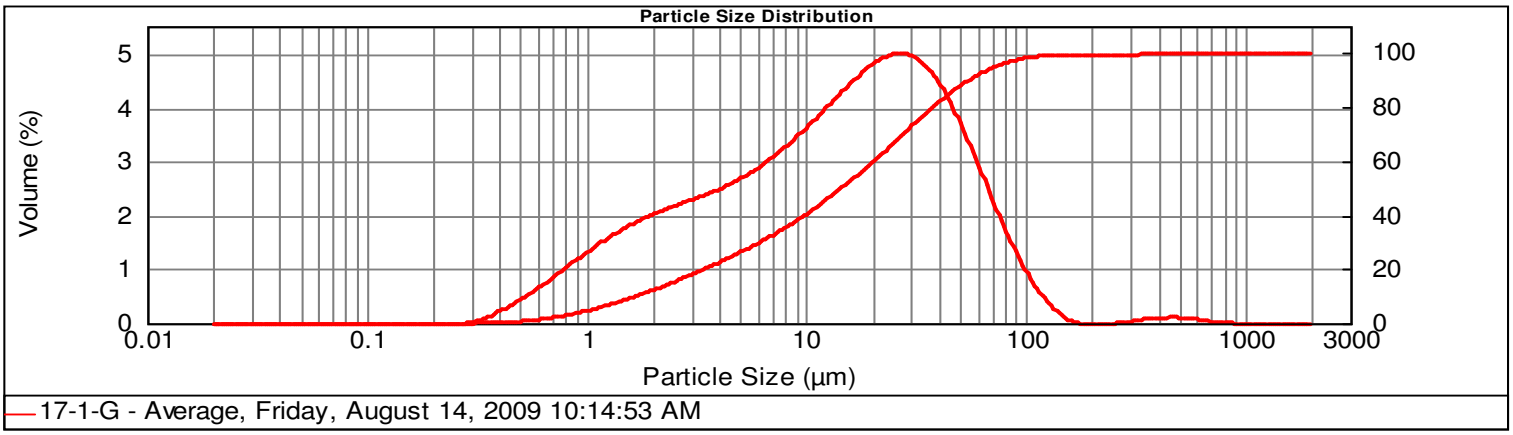
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.4 phi (Silt)

USGS
% Clay (0-2 um) = 12.26
% Fine Silt (2-3.9 um) = 9.82

d (0.1) : 1.675 **um**
d (0.5) : 14.511 **d (0.9) : 54.990**

Wentworth
% Clay (0-3.9 um) = 22.08
% Silt (3.91-31 um) = 51.75
% Coarse Silt (31 - 62.5 um) = 18.76
% Very Fine sand (62.5 - 125 um) = 6.61

% Fine sand (125-250 um) = .33
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = .18
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0.02	100
0.5	(707.10)	1.0	(500.00)	0.16	99.98
1.0	(500.00)	1.5	(353.55)	0.23	99.82
1.5	(353.55)	2.0	(250.00)	0.07	99.59
2.0	(250.00)	2.5	(176.78)	0	99.52
2.5	(176.78)	3.0	(125.00)	0.33	99.53
3.0	(125.00)	3.5	(88.39)	1.9	99.19
3.5	(88.39)	4.0	(62.50)	4.71	97.29
4.0	(62.50)	4.5	(44.19)	8	92.58
4.5	(44.19)	5.0	(31.25)	10.5	84.59
5.0	(31.25)	5.5	(22.10)	11.32	74.08
5.5	(22.10)	6.0	(15.63)	10.65	62.77
6.0	(15.63)	6.5	(11.05)	9.33	52.11
6.5	(11.05)	7.0	(7.81)	7.96	42.78
7.0	(7.81)	7.5	(5.52)	6.79	34.83
7.5	(5.52)	8.0	(3.90)	5.93	28.03

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.33	22.1
8.5	(2.76)	9.0	(1.95)	4.82	16.77
9.0	(1.95)	9.5	(1.38)	4.2	11.95
9.5	(1.38)	10.0	(0.98)	3.38	7.75
10.0	(0.98)	10.5	(0.69)	2.39	4.37
10.5	(0.69)	11.0	(0.49)	1.39	1.98
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:19:16 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.09

D[4,3] = 26.64um = 5.23phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.55um = 8.61phi

D[v,0.5] = 15.06um = 6.05phi
D[v,0.84] = 47.81um = 4.39phi
D[v,0.95] = 80.9um = 3.63phi

Kurtosis = 91.82
Skewness = 7.95
Standard Deviation = 44.43 um = 4.49phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

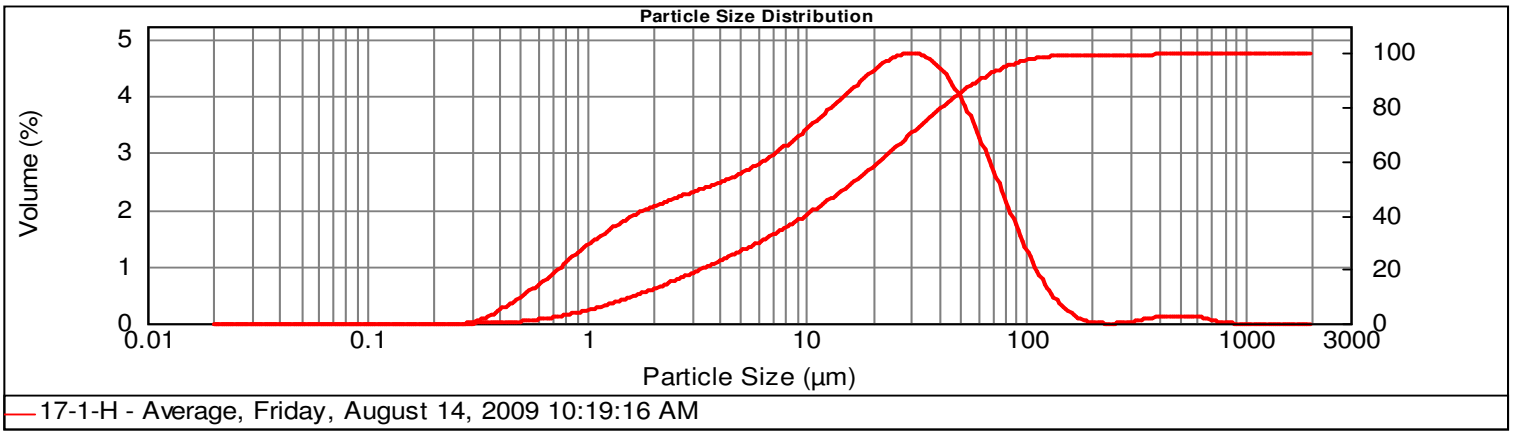
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.35 phi (Silt)

USGS
% Clay (0-2 um) = 12.6
% Fine Silt (2-3.9 um) = 9.85

d (0.1) : 1.635 **um**
d (0.5) : 15.057 **d (0.9) : 61.136**

Wentworth
% Clay (0-3.9 um) = 22.45
% Silt (3.91-31 um) = 48.71
% Coarse Silt (31 - 62.5 um) = 19.31
% Very Fine sand (62.5 - 125 um) = 8.29

% Fine sand (125-250 um) = .68
% Medium sand (250-500 um) = .31
% Coarse sand (500-1000 um) = .25
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0.02	100
0.5	(707.10)	1.0	(500.00)	0.23	99.98
1.0	(500.00)	1.5	(353.55)	0.25	99.75
1.5	(353.55)	2.0	(250.00)	0.06	99.5
2.0	(250.00)	2.5	(176.78)	0.02	99.44
2.5	(176.78)	3.0	(125.00)	0.66	99.42
3.0	(125.00)	3.5	(88.39)	2.62	98.76
3.5	(88.39)	4.0	(62.50)	5.67	96.14
4.0	(62.50)	4.5	(44.19)	8.64	90.47
4.5	(44.19)	5.0	(31.25)	10.42	81.83
5.0	(31.25)	5.5	(22.10)	10.63	71.41
5.5	(22.10)	6.0	(15.63)	9.8	60.78
6.0	(15.63)	6.5	(11.05)	8.63	50.98
6.5	(11.05)	7.0	(7.81)	7.5	42.35
7.0	(7.81)	7.5	(5.52)	6.54	34.85
7.5	(5.52)	8.0	(3.90)	5.83	28.31
8.0	(3.90)	8.5	(2.76)	5.33	22.48
8.5	(2.76)	9.0	(1.95)	4.87	17.15
9.0	(1.95)	9.5	(1.38)	4.29	12.29
9.5	(1.38)	10.0	(0.98)	3.48	8
10.0	(0.98)	10.5	(0.69)	2.47	4.52
10.5	(0.69)	11.0	(0.49)	1.44	2.05
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:23:48 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.35

D[4,3] = 27.49um = 5.19phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.47um = 8.66phi

D[v,0.5] = 14.88um = 6.07phi
D[v,0.84] = 47.27um = 4.4phi
D[v,0.95] = 80.14um = 3.64phi

Kurtosis = 92.42
Skewness = 8.36
Standard Deviation = 52.25 um = 4.26phi

Inclusive SD (Sorting Coeff.) = 2.02 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

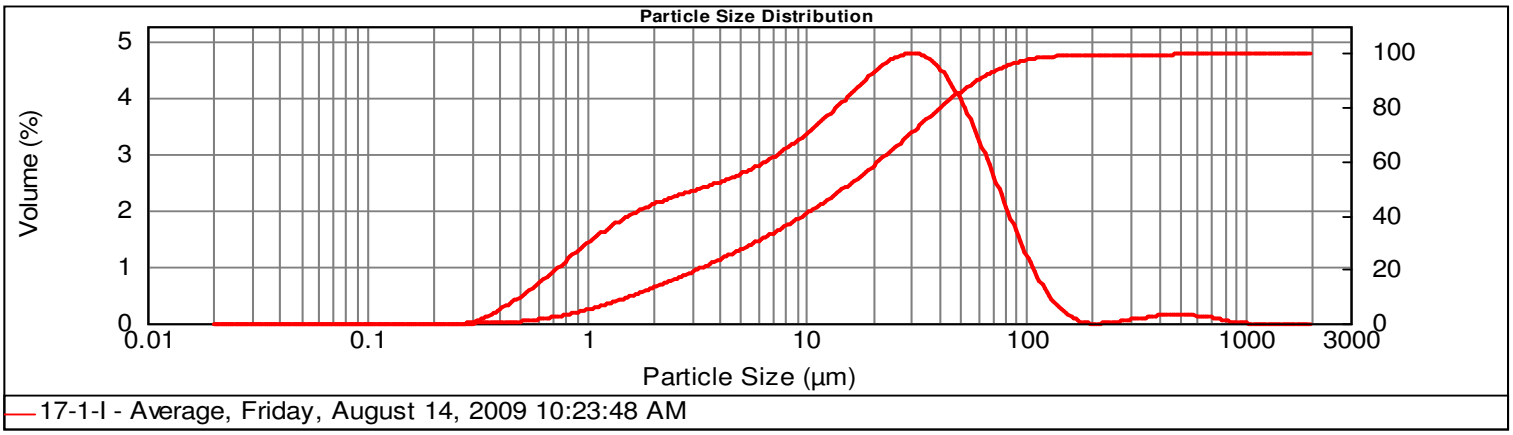
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 13
% Fine Silt (2-3.9 um) = 10.01

d (0.1) : 1.593 **um**
d (0.5) : 14.883 **d (0.9) : 60.397**

Wentworth
% Clay (0-3.9 um) = 23.01
% Silt (3.91-31 um) = 48.41
% Coarse Silt (31 - 62.5 um) = 19.3
% Very Fine sand (62.5 - 125 um) = 7.91

% Fine sand (125-250 um) = .53
% Medium sand (250-500 um) = .45
% Coarse sand (500-1000 um) = .38
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0.09	100
0.5	(707.10)	1.0	(500.00)	0.29	99.91
1.0	(500.00)	1.5	(353.55)	0.31	99.62
1.5	(353.55)	2.0	(250.00)	0.14	99.3
2.0	(250.00)	2.5	(176.78)	0	99.16
2.5	(176.78)	3.0	(125.00)	0.53	99.16
3.0	(125.00)	3.5	(88.39)	2.42	98.63
3.5	(88.39)	4.0	(62.50)	5.49	96.21
4.0	(62.50)	4.5	(44.19)	8.59	90.72
4.5	(44.19)	5.0	(31.25)	10.46	82.13
5.0	(31.25)	5.5	(22.10)	10.67	71.67
5.5	(22.10)	6.0	(15.63)	9.74	61
6.0	(15.63)	6.5	(11.05)	8.5	51.27
6.5	(11.05)	7.0	(7.81)	7.38	42.77
7.0	(7.81)	7.5	(5.52)	6.5	35.39
7.5	(5.52)	8.0	(3.90)	5.86	28.89
8.0	(3.90)	8.5	(2.76)	5.4	23.03
8.5	(2.76)	9.0	(1.95)	4.96	17.64
9.0	(1.95)	9.5	(1.38)	4.4	12.67
9.5	(1.38)	10.0	(0.98)	3.59	8.27
10.0	(0.98)	10.5	(0.69)	2.56	4.68
10.5	(0.69)	11.0	(0.49)	1.49	2.13
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 17-1-J - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:28:14 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.07

D[4,3] = 24.87um = 5.33phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 14.92um = 6.07phi
D[v,0.84] = 47.22um = 4.4phi
D[v,0.95] = 78.93um = 3.66phi

Kurtosis = 59.86
Skewness = 5.34
Standard Deviation = 32.18 um = 4.96phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

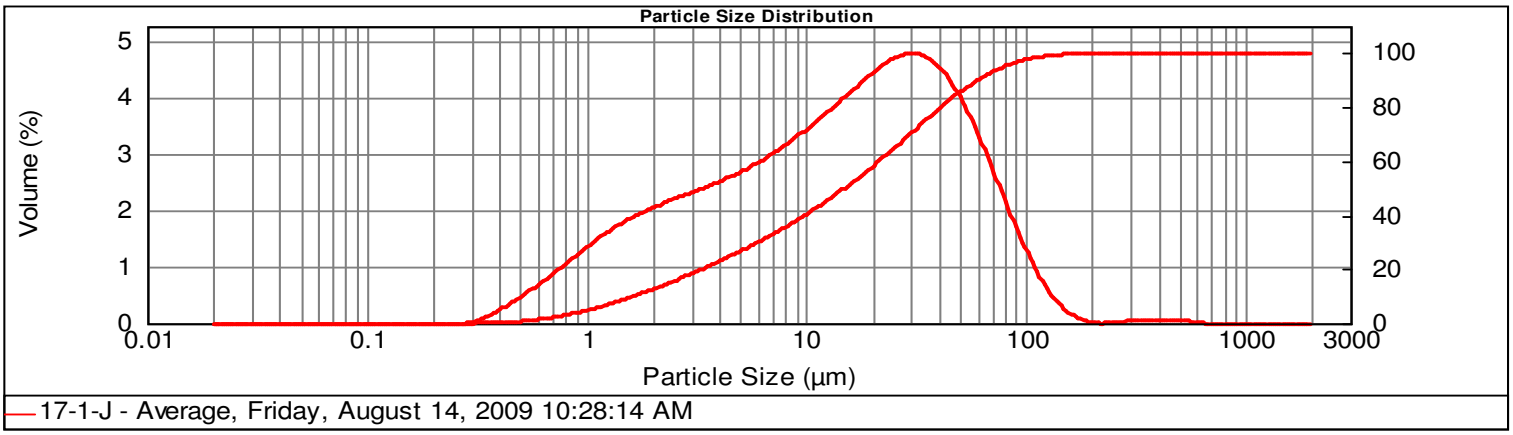
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.36 phi (Silt)

USGS
% Clay (0-2 um) = 12.57
% Fine Silt (2-3.9 um) = 9.89

d (0.1) : 1.637 **um**
d (0.5) : 14.919 **d (0.9) : 60.138**

Wentworth
% Clay (0-3.9 um) = 22.47
% Silt (3.91-31 um) = 48.95
% Coarse Silt (31 - 62.5 um) = 19.41
% Very Fine sand (62.5 - 125 um) = 8.26

% Fine sand (125-250 um) = .67
% Medium sand (250-500 um) = .2
% Coarse sand (500-1000 um) = .04
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0.04	100
1.0	(500.00)	1.5	(353.55)	0.11	99.96
1.5	(353.55)	2.0	(250.00)	0.08	99.85
2.0	(250.00)	2.5	(176.78)	0.03	99.76
2.5	(176.78)	3.0	(125.00)	0.65	99.74
3.0	(125.00)	3.5	(88.39)	2.6	99.09
3.5	(88.39)	4.0	(62.50)	5.66	96.49
4.0	(62.50)	4.5	(44.19)	8.67	90.83
4.5	(44.19)	5.0	(31.25)	10.48	82.15
5.0	(31.25)	5.5	(22.10)	10.67	71.67
5.5	(22.10)	6.0	(15.63)	9.79	61
6.0	(15.63)	6.5	(11.05)	8.62	51.22
6.5	(11.05)	7.0	(7.81)	7.55	42.6
7.0	(7.81)	7.5	(5.52)	6.64	35.05
7.5	(5.52)	8.0	(3.90)	5.92	28.42
8.0	(3.90)	8.5	(2.76)	5.37	22.49
8.5	(2.76)	9.0	(1.95)	4.86	17.12
9.0	(1.95)	9.5	(1.38)	4.26	12.26
9.5	(1.38)	10.0	(0.98)	3.46	8
10.0	(0.98)	10.5	(0.69)	2.47	4.54
10.5	(0.69)	11.0	(0.49)	1.45	2.08
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 18-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 4:06:40 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.74

D[4,3] = 99.01um = 3.34phi
D[v,0.05] = 1.04um = 9.92phi
D[v,0.16] = 2.55um = 8.62phi

D[v,0.5] = 14.34um = 6.12phi
D[v,0.84] = 90.65um = 3.46phi
D[v,0.95] = 667.85um = .58phi

Kurtosis = 14.74
Skewness = 3.68
Standard Deviation = 245.78 um = 2.02phi

Inclusive SD (Sorting Coeff.) = 2.7 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.12 phi (Leptokurtic)

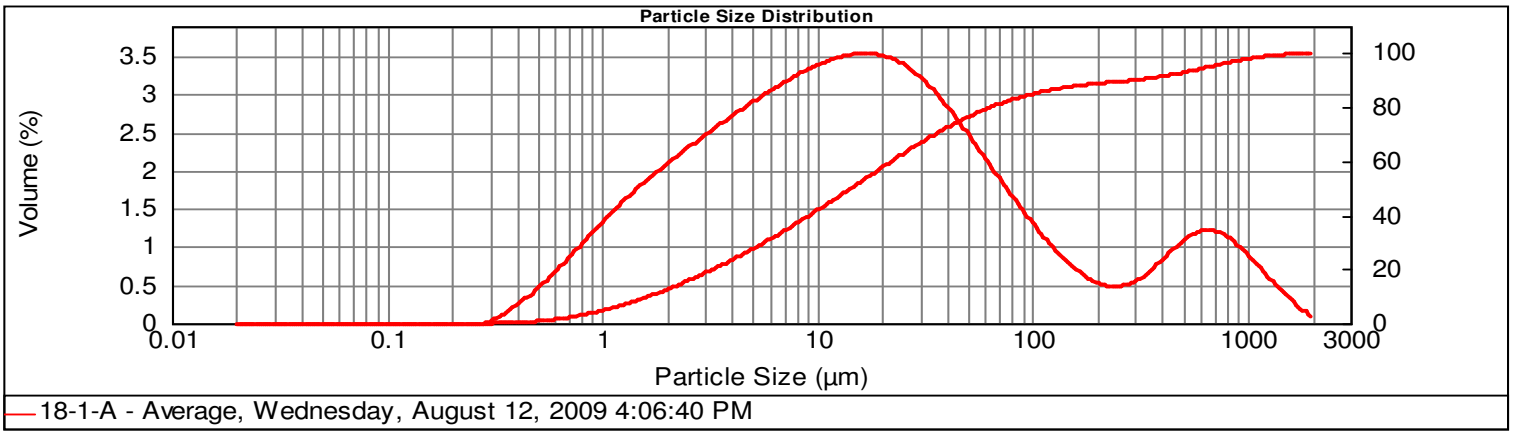
Inclusive Skewness = .11 (Fine Skewed)
Inclusive Mean = 6.07 phi (Silt)

USGS
% Clay (0-2 um) = 12.52
% Fine Silt (2-3.9 um) = 10.46

d (0.1) : 1.649 **um**
d (0.5) : 14.337 **d (0.9) : 291.350**

Wentworth
% Clay (0-3.9 um) = 22.98
% Silt (3.91-31 um) = 44.41
% Coarse Silt (31 - 62.5 um) = 12.28
% Very Fine sand (62.5 - 125 um) = 6.89

% Fine sand (125-250 um) = 2.94
% Medium sand (250-500 um) = 3.27
% Coarse sand (500-1000 um) = 5.14
% Very Coarse sand (1000 - 2000 um) = 2.09



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.58	100
-0.5	(1414.21)	0.0	(1000.00)	1.52	99.42
0.0	(1000.00)	0.5	(707.10)	2.45	97.91
0.5	(707.10)	1.0	(500.00)	2.68	95.45
1.0	(500.00)	1.5	(353.55)	2.01	92.77
1.5	(353.55)	2.0	(250.00)	1.26	90.76
2.0	(250.00)	2.5	(176.78)	1.18	89.5
2.5	(176.78)	3.0	(125.00)	1.76	88.32
3.0	(125.00)	3.5	(88.39)	2.81	86.56
3.5	(88.39)	4.0	(62.50)	4.08	83.75
4.0	(62.50)	4.5	(44.19)	5.43	79.67
4.5	(44.19)	5.0	(31.25)	6.69	74.24
5.0	(31.25)	5.5	(22.10)	7.59	67.56
5.5	(22.10)	6.0	(15.63)	7.98	59.97
6.0	(15.63)	6.5	(11.05)	7.93	51.99
6.5	(11.05)	7.0	(7.81)	7.57	44.06
7.0	(7.81)	7.5	(5.52)	7.04	36.49
7.5	(5.52)	8.0	(3.90)	6.43	29.44
8.0	(3.90)	8.5	(2.76)	5.76	23.01
8.5	(2.76)	9.0	(1.95)	5.05	17.25
9.0	(1.95)	9.5	(1.38)	4.29	12.2
9.5	(1.38)	10.0	(0.98)	3.41	7.91
10.0	(0.98)	10.5	(0.69)	2.42	4.5
10.5	(0.69)	11.0	(0.49)	1.43	2.08
11.0	(0.49)	11.5	(0.35)	0.59	0.65
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 18-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 4:11:45 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.91

D[4,3] = 62.48um = 4phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.62um = 8.57phi

D[v,0.5] = 14.68um = 6.09phi
D[v,0.84] = 56.93um = 4.13phi
D[v,0.95] = 252.08um = 1.99phi

Kurtosis = 33.87
Skewness = 5.5
Standard Deviation = 187.46 um = 2.42phi

Inclusive SD (Sorting Coeff.) = 2.31 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.07 phi (Mesokurtic)

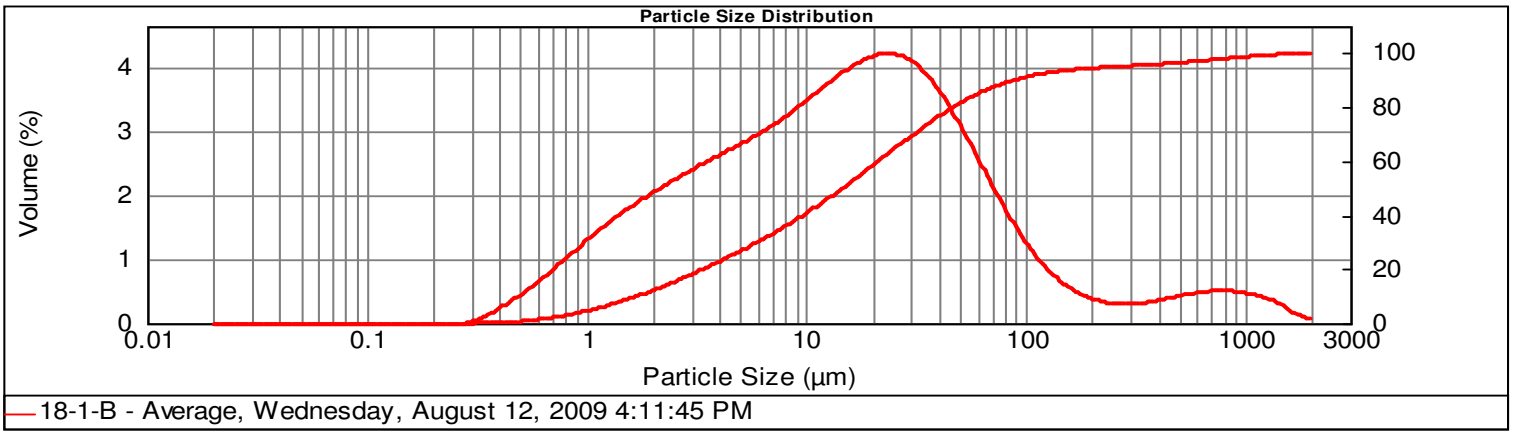
Inclusive Skewness = -0.04 (Near Symmetrical)
Inclusive Mean = 6.27 phi (Silt)

USGS
% Clay (0-2 um) = 12.18
% Fine Silt (2-3.9 um) = 10.14

d (0.1) : 1.687 um
d (0.5) : 14.684
d (0.9) : 87.491

Wentworth
% Clay (0-3.9 um) = 22.32
% Silt (3.91-31 um) = 47.82
% Coarse Silt (31 - 62.5 um) = 15.45
% Very Fine sand (62.5 - 125 um) = 7.15

% Fine sand (125-250 um) = 2.24
% Medium sand (250-500 um) = 1.52
% Coarse sand (500-1000 um) = 2.19
% Very Coarse sand (1000 - 2000 um) = 1.3



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.38	100
-0.5	(1414.21)	0.0	(1000.00)	0.92	99.62
0.0	(1000.00)	0.5	(707.10)	1.13	98.7
0.5	(707.10)	1.0	(500.00)	1.06	97.57
1.0	(500.00)	1.5	(353.55)	0.84	96.5
1.5	(353.55)	2.0	(250.00)	0.68	95.67
2.0	(250.00)	2.5	(176.78)	0.83	94.98
2.5	(176.78)	3.0	(125.00)	1.41	94.15
3.0	(125.00)	3.5	(88.39)	2.64	92.74
3.5	(88.39)	4.0	(62.50)	4.51	90.1
4.0	(62.50)	4.5	(44.19)	6.69	85.59
4.5	(44.19)	5.0	(31.25)	8.54	78.89
5.0	(31.25)	5.5	(22.10)	9.44	70.35
5.5	(22.10)	6.0	(15.63)	9.31	60.91
6.0	(15.63)	6.5	(11.05)	8.56	51.6
6.5	(11.05)	7.0	(7.81)	7.65	43.04
7.0	(7.81)	7.5	(5.52)	6.85	35.38
7.5	(5.52)	8.0	(3.90)	6.19	28.53
8.0	(3.90)	8.5	(2.76)	5.57	22.35
8.5	(2.76)	9.0	(1.95)	4.91	16.78
9.0	(1.95)	9.5	(1.38)	4.18	11.86
9.5	(1.38)	10.0	(0.98)	3.32	7.68
10.0	(0.98)	10.5	(0.69)	2.35	4.36
10.5	(0.69)	11.0	(0.49)	1.38	2.01
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 18-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 4:16:44 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.53

D[4,3] = 74.67um = 3.74phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.72um = 8.52phi

D[v,0.5] = 14.9um = 6.07phi
D[v,0.84] = 46.41um = 4.43phi
D[v,0.95] = 478.84um = 1.06phi

Kurtosis = 22.8
Skewness = 4.72
Standard Deviation = 240.81 um = 2.05phi

Inclusive SD (Sorting Coeff.) = 2.36 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.29 phi (Leptokurtic)

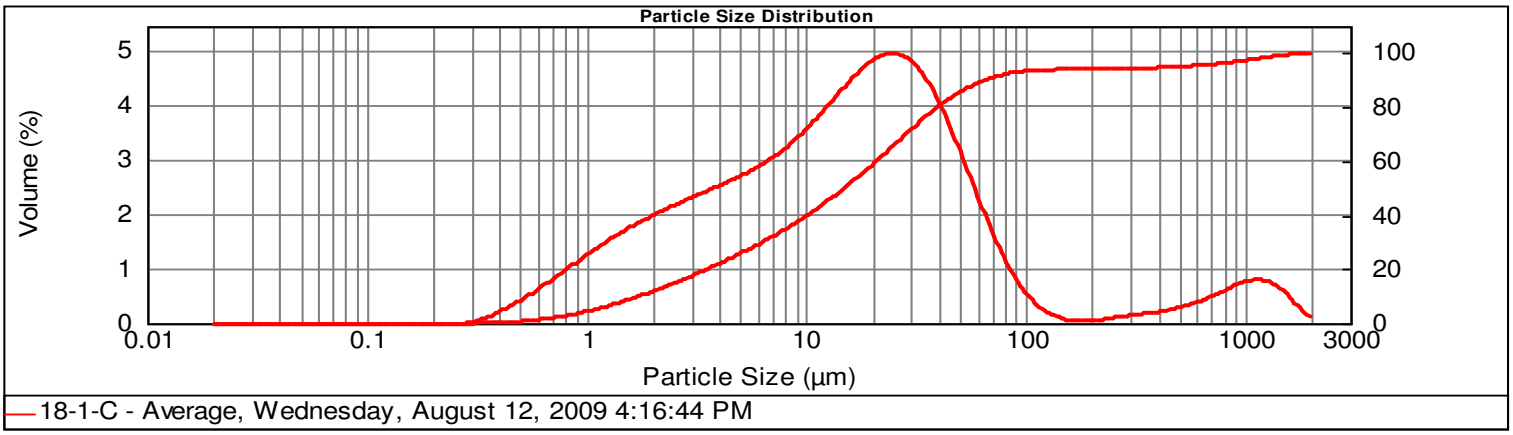
Inclusive Skewness = -0.03 (Near Symmetrical)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 11.79
% Fine Silt (2-3.9 um) = 9.8

d (0.1) : 1.734 **um**
d (0.5) : 14.903 **d (0.9) : 64.815**

Wentworth
% Clay (0-3.9 um) = 21.59
% Silt (3.91-31 um) = 51.3
% Coarse Silt (31 - 62.5 um) = 16.62
% Very Fine sand (62.5 - 125 um) = 4.39

% Fine sand (125-250 um) = .35
% Medium sand (250-500 um) = .84
% Coarse sand (500-1000 um) = 2.32
% Very Coarse sand (1000 - 2000 um) = 2.6



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.86	100
-0.5	(1414.21)	0.0	(1000.00)	1.74	99.14
0.0	(1000.00)	0.5	(707.10)	1.45	97.4
0.5	(707.10)	1.0	(500.00)	0.87	95.95
1.0	(500.00)	1.5	(353.55)	0.52	95.08
1.5	(353.55)	2.0	(250.00)	0.32	94.56
2.0	(250.00)	2.5	(176.78)	0.14	94.24
2.5	(176.78)	3.0	(125.00)	0.2	94.1
3.0	(125.00)	3.5	(88.39)	1.07	93.89
3.5	(88.39)	4.0	(62.50)	3.32	92.82
4.0	(62.50)	4.5	(44.19)	6.65	89.5
4.5	(44.19)	5.0	(31.25)	9.72	82.85
5.0	(31.25)	5.5	(22.10)	11.12	73.13
5.5	(22.10)	6.0	(15.63)	10.66	62.02
6.0	(15.63)	6.5	(11.05)	9.25	51.35
6.5	(11.05)	7.0	(7.81)	7.8	42.1
7.0	(7.81)	7.5	(5.52)	6.72	34.3
7.5	(5.52)	8.0	(3.90)	5.97	27.58
8.0	(3.90)	8.5	(2.76)	5.37	21.61
8.5	(2.76)	9.0	(1.95)	4.76	16.24
9.0	(1.95)	9.5	(1.38)	4.07	11.48
9.5	(1.38)	10.0	(0.98)	3.23	7.42
10.0	(0.98)	10.5	(0.69)	2.28	4.19
10.5	(0.69)	11.0	(0.49)	1.33	1.91
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 18-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured:
Wednesday, August 12, 2009
4:21:10 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.85

D[4,3] = 28.76um = 5.12phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.6um = 8.59phi

D[v,0.5] = 13.66um = 6.19phi
D[v,0.84] = 38.73um = 4.69phi
D[v,0.95] = 64.16um = 3.96phi

Kurtosis = 129.63
Skewness = 10.68
Standard Deviation = 95.03 um = 3.4phi

Inclusive SD (Sorting Coeff.) = 1.87 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

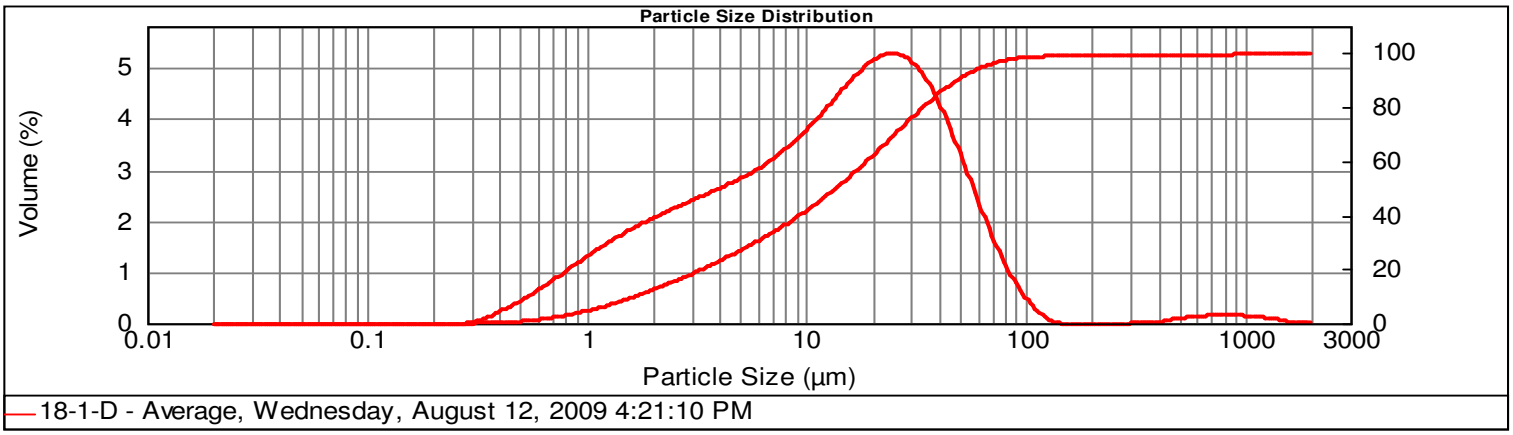
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 12.27
% Fine Silt (2-3.9 um) = 10.22

d (0.1) : 1.677 **um**
d (0.5) : 13.663 **d (0.9) : 48.758**

Wentworth
% Clay (0-3.9 um) = 22.5
% Silt (3.91-31 um) = 54.5
% Coarse Silt (31 - 62.5 um) = 17.63
% Very Fine sand (62.5 - 125 um) = 4.26

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .12
% Coarse sand (500-1000 um) = .64
% Very Coarse sand (1000 - 2000 um) = .32



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.26	99.94
0.0	(1000.00)	0.5	(707.10)	0.35	99.68
0.5	(707.10)	1.0	(500.00)	0.29	99.32
1.0	(500.00)	1.5	(353.55)	0.11	99.03
1.5	(353.55)	2.0	(250.00)	0.01	98.92
2.0	(250.00)	2.5	(176.78)	0	98.91
2.5	(176.78)	3.0	(125.00)	0.02	98.91
3.0	(125.00)	3.5	(88.39)	0.91	98.89
3.5	(88.39)	4.0	(62.50)	3.35	97.98
4.0	(62.50)	4.5	(44.19)	7	94.63
4.5	(44.19)	5.0	(31.25)	10.36	87.63
5.0	(31.25)	5.5	(22.10)	11.88	77.27
5.5	(22.10)	6.0	(15.63)	11.38	65.39
6.0	(15.63)	6.5	(11.05)	9.85	54.01
6.5	(11.05)	7.0	(7.81)	8.28	44.17
7.0	(7.81)	7.5	(5.52)	7.1	35.89
7.5	(5.52)	8.0	(3.90)	6.27	28.79
8.0	(3.90)	8.5	(2.76)	5.61	22.52
8.5	(2.76)	9.0	(1.95)	4.96	16.91
9.0	(1.95)	9.5	(1.38)	4.23	11.96
9.5	(1.38)	10.0	(0.98)	3.37	7.72
10.0	(0.98)	10.5	(0.69)	2.37	4.36
10.5	(0.69)	11.0	(0.49)	1.38	1.99
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 18-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured:
Wednesday, August 12, 2009
4:26:43 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.54

D[4,3] = 34.59um = 4.85phi
D[v,0.05] = 1.06um = 9.89phi
D[v,0.16] = 2.66um = 8.56phi

D[v,0.5] = 14.77um = 6.08phi
D[v,0.84] = 44.99um = 4.47phi
D[v,0.95] = 78.93um = 3.66phi

Kurtosis = 103.63
Skewness = 9.43
Standard Deviation = 109.49 um = 3.19phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

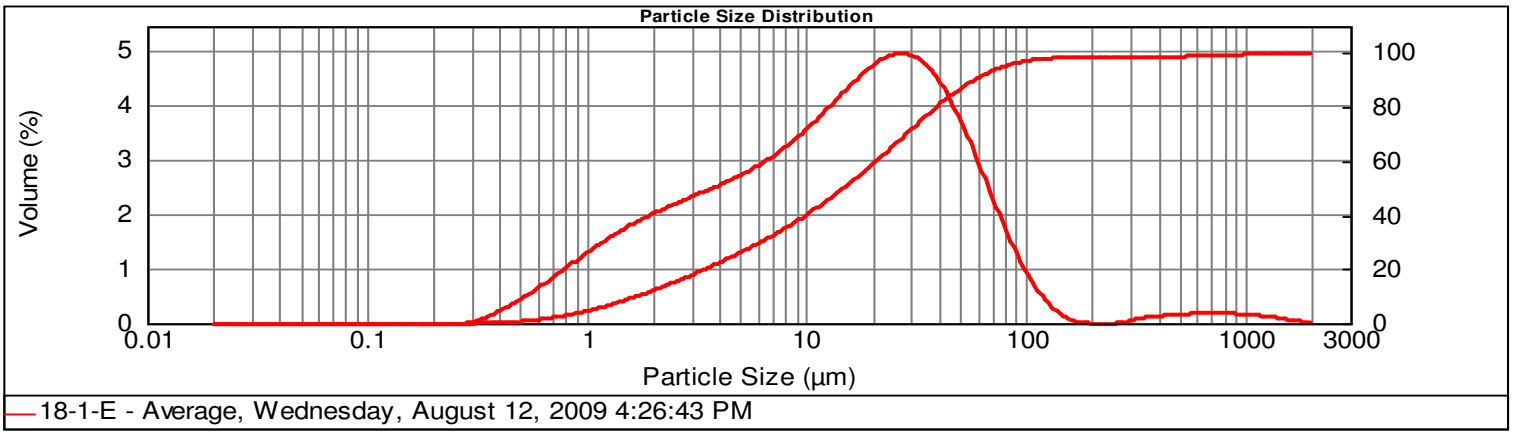
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.08
% Fine Silt (2-3.9 um) = 9.84

d (0.1) : 1.696 **um**
d (0.5) : 14.773 **d (0.9) : 57.885**

Wentworth
% Clay (0-3.9 um) = 21.92
% Silt (3.91-31 um) = 50.94
% Coarse Silt (31 - 62.5 um) = 18.63
% Very Fine sand (62.5 - 125 um) = 6.54

% Fine sand (125-250 um) = .35
% Medium sand (250-500 um) = .42
% Coarse sand (500-1000 um) = .8
% Very Coarse sand (1000 - 2000 um) = .41



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.11	100
-0.5	(1414.21)	0.0	(1000.00)	0.3	99.89
0.0	(1000.00)	0.5	(707.10)	0.4	99.59
0.5	(707.10)	1.0	(500.00)	0.4	99.19
1.0	(500.00)	1.5	(353.55)	0.31	98.79
1.5	(353.55)	2.0	(250.00)	0.11	98.49
2.0	(250.00)	2.5	(176.78)	0	98.38
2.5	(176.78)	3.0	(125.00)	0.35	98.38
3.0	(125.00)	3.5	(88.39)	1.86	98.03
3.5	(88.39)	4.0	(62.50)	4.68	96.17
4.0	(62.50)	4.5	(44.19)	7.97	91.49
4.5	(44.19)	5.0	(31.25)	10.4	83.52
5.0	(31.25)	5.5	(22.10)	11.13	73.11
5.5	(22.10)	6.0	(15.63)	10.42	61.98
6.0	(15.63)	6.5	(11.05)	9.09	51.57
6.5	(11.05)	7.0	(7.81)	7.79	42.47
7.0	(7.81)	7.5	(5.52)	6.75	34.69
7.5	(5.52)	8.0	(3.90)	5.99	27.94

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.38	21.95
8.5	(2.76)	9.0	(1.95)	4.8	16.56
9.0	(1.95)	9.5	(1.38)	4.13	11.77
9.5	(1.38)	10.0	(0.98)	3.31	7.64
10.0	(0.98)	10.5	(0.69)	2.34	4.33
10.5	(0.69)	11.0	(0.49)	1.38	1.98
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 18-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 4:31:45 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.50

D[4,3] = 29.63um = 5.08phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.61um = 8.58phi

D[v,0.5] = 14.66um = 6.09phi
D[v,0.84] = 41.75um = 4.58phi
D[v,0.95] = 69.09um = 3.86phi

Kurtosis = 115.27
Skewness = 10.06
Standard Deviation = 87.78 um = 3.51phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

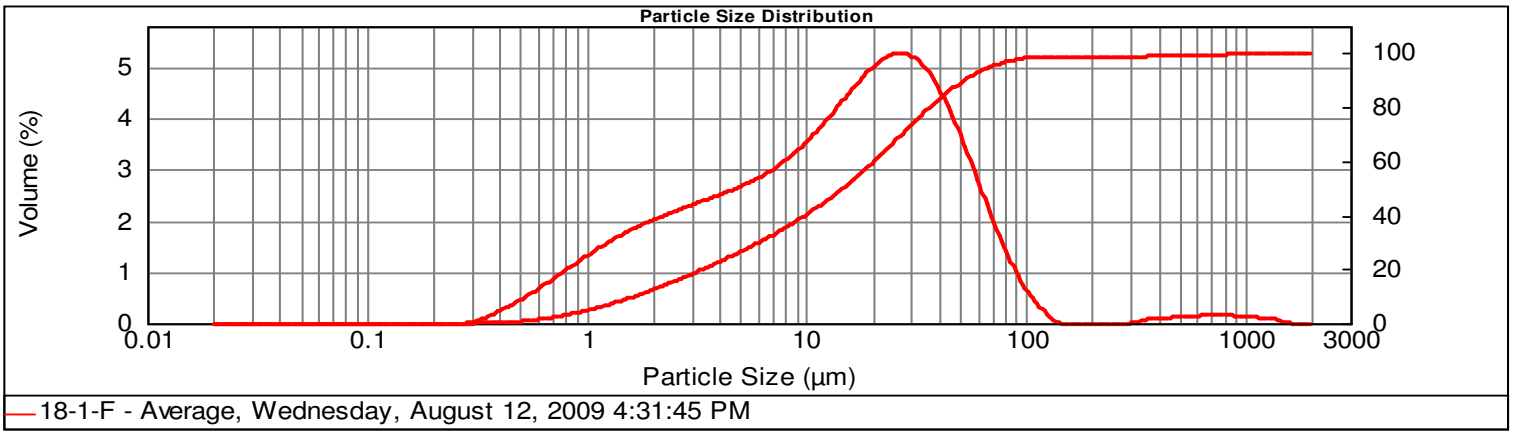
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 12.34
% Fine Silt (2-3.9 um) = 9.85

d (0.1) : 1.663 **um**
d (0.5) : 14.657 **d (0.9) : 52.542**

Wentworth
% Clay (0-3.9 um) = 22.19
% Silt (3.91-31 um) = 52.28
% Coarse Silt (31 - 62.5 um) = 18.98
% Very Fine sand (62.5 - 125 um) = 5.34

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = .66
% Very Coarse sand (1000 - 2000 um) = .25



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.02	100
-0.5	(1414.21)	0.0	(1000.00)	0.24	99.98
0.0	(1000.00)	0.5	(707.10)	0.34	99.75
0.5	(707.10)	1.0	(500.00)	0.32	99.41
1.0	(500.00)	1.5	(353.55)	0.23	99.09
1.5	(353.55)	2.0	(250.00)	0.03	98.86
2.0	(250.00)	2.5	(176.78)	0	98.83
2.5	(176.78)	3.0	(125.00)	0.04	98.83
3.0	(125.00)	3.5	(88.39)	1.26	98.79
3.5	(88.39)	4.0	(62.50)	4.07	97.52
4.0	(62.50)	4.5	(44.19)	7.83	93.45
4.5	(44.19)	5.0	(31.25)	10.88	85.62
5.0	(31.25)	5.5	(22.10)	11.89	74.74
5.5	(22.10)	6.0	(15.63)	11	62.85
6.0	(15.63)	6.5	(11.05)	9.31	51.85
6.5	(11.05)	7.0	(7.81)	7.75	42.54
7.0	(7.81)	7.5	(5.52)	6.65	34.79
7.5	(5.52)	8.0	(3.90)	5.93	28.14
8.0	(3.90)	8.5	(2.76)	5.37	22.22
8.5	(2.76)	9.0	(1.95)	4.82	16.84
9.0	(1.95)	9.5	(1.38)	4.18	12.03
9.5	(1.38)	10.0	(0.98)	3.38	7.85
10.0	(0.98)	10.5	(0.69)	2.41	4.47
10.5	(0.69)	11.0	(0.49)	1.42	2.06
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 18-1-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 4:36:27 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 10.98

D[4,3] = 28.67um = 5.12phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.74um = 8.51phi

D[v,0.5] = 15.92um = 5.97phi
D[v,0.84] = 46.32um = 4.43phi
D[v,0.95] = 77.61um = 3.69phi

Kurtosis = 124.58
Skewness = 9.96
Standard Deviation = 62.95 um = 3.99phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

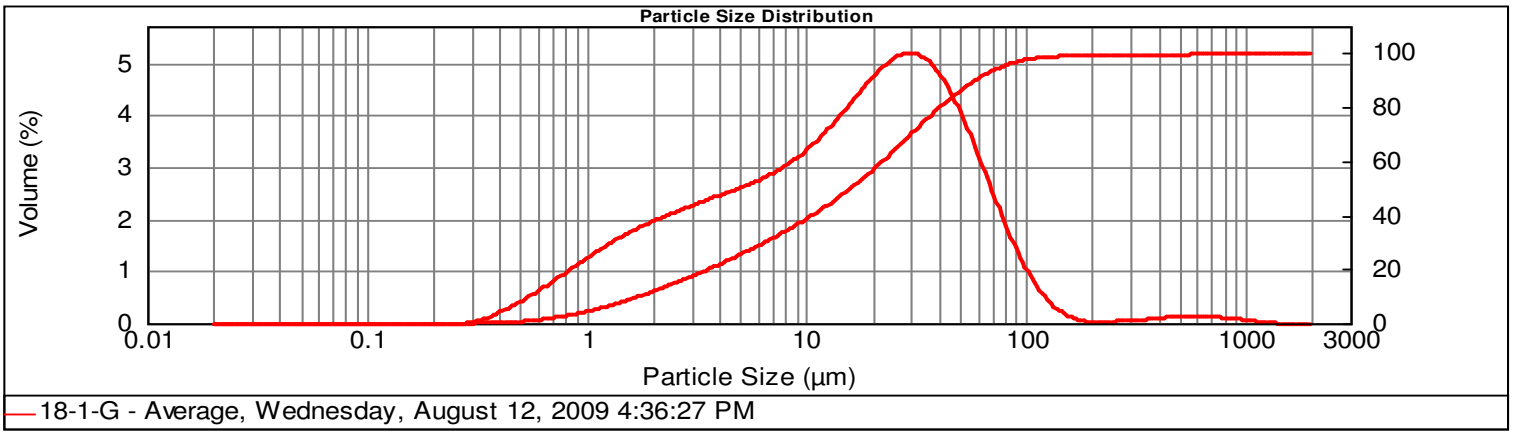
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.31 phi (Silt)

USGS
% Clay (0-2 um) = 11.7
% Fine Silt (2-3.9 um) = 9.63

d (0.1) : 1.745 **um**
d (0.5) : 15.916 **d (0.9) : 58.603**

Wentworth
% Clay (0-3.9 um) = 21.33
% Silt (3.91-31 um) = 49.82
% Coarse Silt (31 - 62.5 um) = 20.21
% Very Fine sand (62.5 - 125 um) = 7.24

% Fine sand (125-250 um) = .51
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = .49
% Very Coarse sand (1000 - 2000 um) = .05



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.05	100
0.0	(1000.00)	0.5	(707.10)	0.21	99.95
0.5	(707.10)	1.0	(500.00)	0.28	99.74
1.0	(500.00)	1.5	(353.55)	0.23	99.46
1.5	(353.55)	2.0	(250.00)	0.12	99.23
2.0	(250.00)	2.5	(176.78)	0.03	99.11
2.5	(176.78)	3.0	(125.00)	0.47	99.08
3.0	(125.00)	3.5	(88.39)	2.09	98.6
3.5	(88.39)	4.0	(62.50)	5.15	96.52
4.0	(62.50)	4.5	(44.19)	8.73	91.36
4.5	(44.19)	5.0	(31.25)	11.21	82.63
5.0	(31.25)	5.5	(22.10)	11.59	71.42
5.5	(22.10)	6.0	(15.63)	10.34	59.84
6.0	(15.63)	6.5	(11.05)	8.66	49.49
6.5	(11.05)	7.0	(7.81)	7.3	40.83
7.0	(7.81)	7.5	(5.52)	6.39	33.53
7.5	(5.52)	8.0	(3.90)	5.78	27.13
8.0	(3.90)	8.5	(2.76)	5.26	21.36
8.5	(2.76)	9.0	(1.95)	4.7	16.1
9.0	(1.95)	9.5	(1.38)	4.04	11.4
9.5	(1.38)	10.0	(0.98)	3.22	7.35
10.0	(0.98)	10.5	(0.69)	2.26	4.14
10.5	(0.69)	11.0	(0.49)	1.31	1.87
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 19-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:32:40 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.34

D[4,3] = 53.72um = 4.22phi
D[v,0.05] = .97um = 10.01phi
D[v,0.16] = 2.32um = 8.75phi

D[v,0.5] = 14.04um = 6.15phi
D[v,0.84] = 47.22um = 4.4phi
D[v,0.95] = 96.59um = 3.37phi

Kurtosis = 41.28
Skewness = 6.19
Standard Deviation = 185.71 um = 2.43phi

Inclusive SD (Sorting Coeff.) = 2.09 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

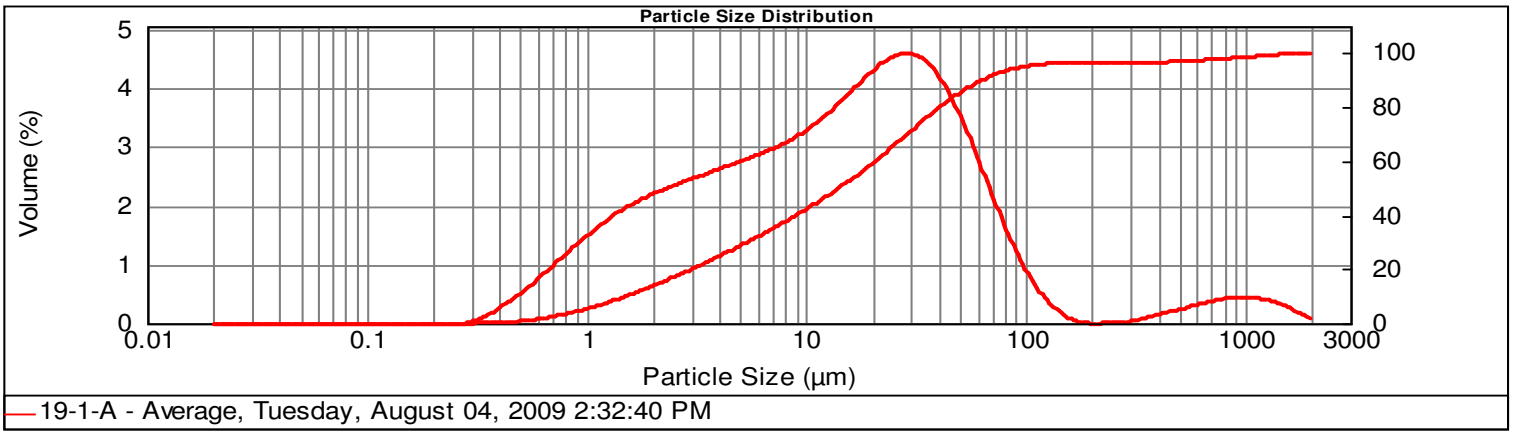
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 13.82
% Fine Silt (2-3.9 um) = 10.53

d (0.1) : 1.513 **um**
d (0.5) : 14.037 **d (0.9) : 62.813**

Wentworth
% Clay (0-3.9 um) = 24.34
% Silt (3.91-31 um) = 47.91
% Coarse Silt (31 - 62.5 um) = 17.66
% Very Fine sand (62.5 - 125 um) = 6.2

% Fine sand (125-250 um) = .37
% Medium sand (250-500 um) = .46
% Coarse sand (500-1000 um) = 1.66
% Very Coarse sand (1000 - 2000 um) = 1.4



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.48	100
-0.5	(1414.21)	0.0	(1000.00)	0.92	99.52
0.0	(1000.00)	0.5	(707.10)	0.96	98.6
0.5	(707.10)	1.0	(500.00)	0.7	97.64
1.0	(500.00)	1.5	(353.55)	0.37	96.94
1.5	(353.55)	2.0	(250.00)	0.09	96.57
2.0	(250.00)	2.5	(176.78)	0	96.48
2.5	(176.78)	3.0	(125.00)	0.36	96.47
3.0	(125.00)	3.5	(88.39)	1.77	96.11
3.5	(88.39)	4.0	(62.50)	4.42	94.34
4.0	(62.50)	4.5	(44.19)	7.58	89.91
4.5	(44.19)	5.0	(31.25)	9.84	82.33
5.0	(31.25)	5.5	(22.10)	10.33	72.5
5.5	(22.10)	6.0	(15.63)	9.48	62.17
6.0	(15.63)	6.5	(11.05)	8.26	52.68
6.5	(11.05)	7.0	(7.81)	7.28	44.42
7.0	(7.81)	7.5	(5.52)	6.63	37.14
7.5	(5.52)	8.0	(3.90)	6.14	30.51

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.69	24.37
8.5	(2.76)	9.0	(1.95)	5.21	18.69
9.0	(1.95)	9.5	(1.38)	4.62	13.48
9.5	(1.38)	10.0	(0.98)	3.79	8.85
10.0	(0.98)	10.5	(0.69)	2.73	5.06
10.5	(0.69)	11.0	(0.49)	1.61	2.33
11.0	(0.49)	11.5	(0.35)	0.65	0.71
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 19-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:37:59 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.08

D[4,3] = 47.9um = 4.38phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.44um = 8.68phi

D[v,0.5] = 14.8um = 6.08phi
D[v,0.84] = 46.74um = 4.42phi
D[v,0.95] = 86.26um = 3.54phi

Kurtosis = 51.95
Skewness = 6.93
Standard Deviation = 168.59 um = 2.57phi

Inclusive SD (Sorting Coeff.) = 2.04 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

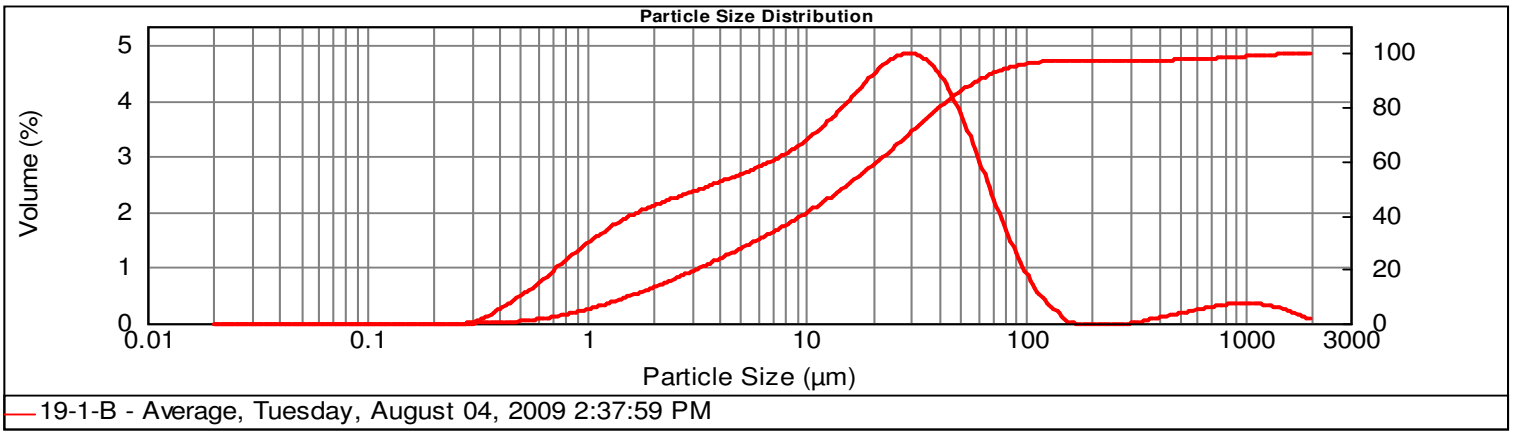
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 13.2
% Fine Silt (2-3.9 um) = 10.09

d (0.1) : 1.569 **um**
d (0.5) : 14.797 **d (0.9) : 60.649**

Wentworth
% Clay (0-3.9 um) = 23.29
% Silt (3.91-31 um) = 48.49
% Coarse Silt (31 - 62.5 um) = 18.79
% Very Fine sand (62.5 - 125 um) = 6.42

% Fine sand (125-250 um) = .27
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = 1.31
% Very Coarse sand (1000 - 2000 um) = 1.16



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.4	100
-0.5	(1414.21)	0.0	(1000.00)	0.76	99.6
0.0	(1000.00)	0.5	(707.10)	0.77	98.84
0.5	(707.10)	1.0	(500.00)	0.54	98.07
1.0	(500.00)	1.5	(353.55)	0.26	97.53
1.5	(353.55)	2.0	(250.00)	0.02	97.27
2.0	(250.00)	2.5	(176.78)	0	97.25
2.5	(176.78)	3.0	(125.00)	0.27	97.25
3.0	(125.00)	3.5	(88.39)	1.77	96.99
3.5	(88.39)	4.0	(62.50)	4.65	95.22
4.0	(62.50)	4.5	(44.19)	8.08	90.57
4.5	(44.19)	5.0	(31.25)	10.45	82.49
5.0	(31.25)	5.5	(22.10)	10.84	72.03
5.5	(22.10)	6.0	(15.63)	9.79	61.19
6.0	(15.63)	6.5	(11.05)	8.38	51.41
6.5	(11.05)	7.0	(7.81)	7.26	43.02
7.0	(7.81)	7.5	(5.52)	6.5	35.77
7.5	(5.52)	8.0	(3.90)	5.95	29.26

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.46	23.32
8.5	(2.76)	9.0	(1.95)	4.98	17.86
9.0	(1.95)	9.5	(1.38)	4.42	12.87
9.5	(1.38)	10.0	(0.98)	3.63	8.45
10.0	(0.98)	10.5	(0.69)	2.61	4.82
10.5	(0.69)	11.0	(0.49)	1.54	2.21
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 19-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:42:24 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.05

D[4,3] = 47.88um = 4.38phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.57um = 8.6phi

D[v,0.5] = 15.98um = 5.97phi
D[v,0.84] = 49.86um = 4.33phi
D[v,0.95] = 89.21um = 3.49phi

Kurtosis = 55.64
Skewness = 7.18
Standard Deviation = 166.06 um = 2.59phi

Inclusive SD (Sorting Coeff.) = 2.05 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

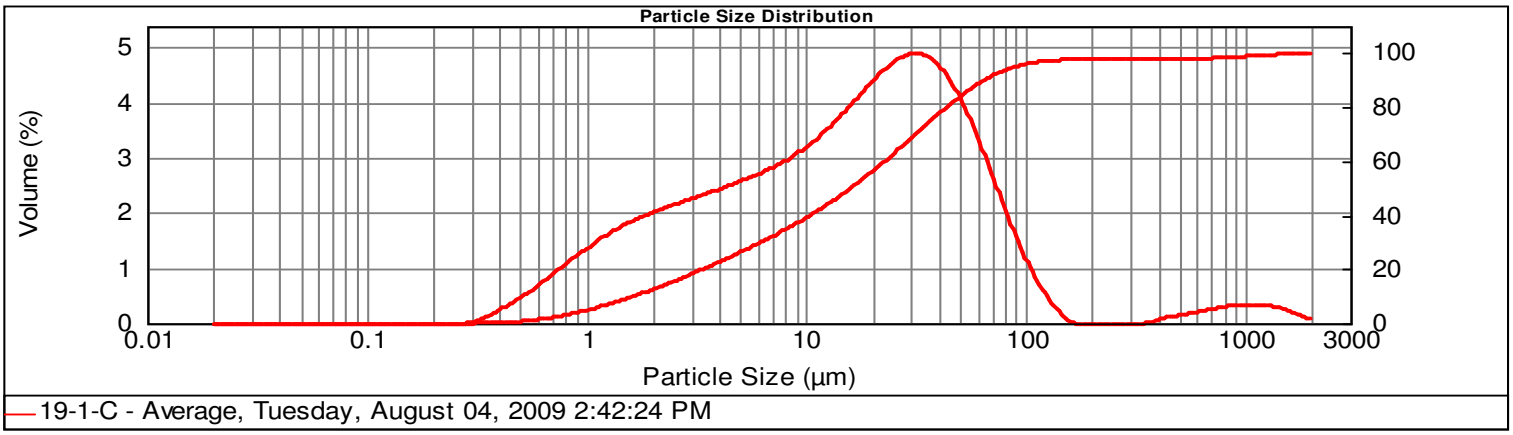
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.3 phi (Silt)

USGS
% Clay (0-2 um) = 12.56
% Fine Silt (2-3.9 um) = 9.65

d (0.1) : 1.634 **um**
d (0.5) : 15.978 **d (0.9) : 64.287**

Wentworth
% Clay (0-3.9 um) = 22.22
% Silt (3.91-31 um) = 47.38
% Coarse Silt (31 - 62.5 um) = 19.83
% Very Fine sand (62.5 - 125 um) = 7.76

% Fine sand (125-250 um) = .35
% Medium sand (250-500 um) = .17
% Coarse sand (500-1000 um) = 1.15
% Very Coarse sand (1000 - 2000 um) = 1.15



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.41	100
-0.5	(1414.21)	0.0	(1000.00)	0.73	99.59
0.0	(1000.00)	0.5	(707.10)	0.7	98.85
0.5	(707.10)	1.0	(500.00)	0.45	98.16
1.0	(500.00)	1.5	(353.55)	0.17	97.71
1.5	(353.55)	2.0	(250.00)	0	97.53
2.0	(250.00)	2.5	(176.78)	0	97.53
2.5	(176.78)	3.0	(125.00)	0.35	97.53
3.0	(125.00)	3.5	(88.39)	2.28	97.18
3.5	(88.39)	4.0	(62.50)	5.48	94.9
4.0	(62.50)	4.5	(44.19)	8.8	89.42
4.5	(44.19)	5.0	(31.25)	10.77	80.62
5.0	(31.25)	5.5	(22.10)	10.81	69.85
5.5	(22.10)	6.0	(15.63)	9.61	59.04
6.0	(15.63)	6.5	(11.05)	8.17	49.43
6.5	(11.05)	7.0	(7.81)	7.03	41.26
7.0	(7.81)	7.5	(5.52)	6.27	34.22
7.5	(5.52)	8.0	(3.90)	5.71	27.95
8.0	(3.90)	8.5	(2.76)	5.23	22.24
8.5	(2.76)	9.0	(1.95)	4.76	17.01
9.0	(1.95)	9.5	(1.38)	4.22	12.25
9.5	(1.38)	10.0	(0.98)	3.45	8.03
10.0	(0.98)	10.5	(0.69)	2.48	4.58
10.5	(0.69)	11.0	(0.49)	1.46	2.1
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 19-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:46:54 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.89

D[4,3] = 49.68um = 4.33phi
D[v,0.05] = 1.01um = 9.96phi
D[v,0.16] = 2.45um = 8.67phi

D[v,0.5] = 14.38um = 6.12phi
D[v,0.84] = 46.06um = 4.44phi
D[v,0.95] = 86.67um = 3.53phi

Kurtosis = 48.09
Skewness = 6.7
Standard Deviation = 177.34 um = 2.5phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

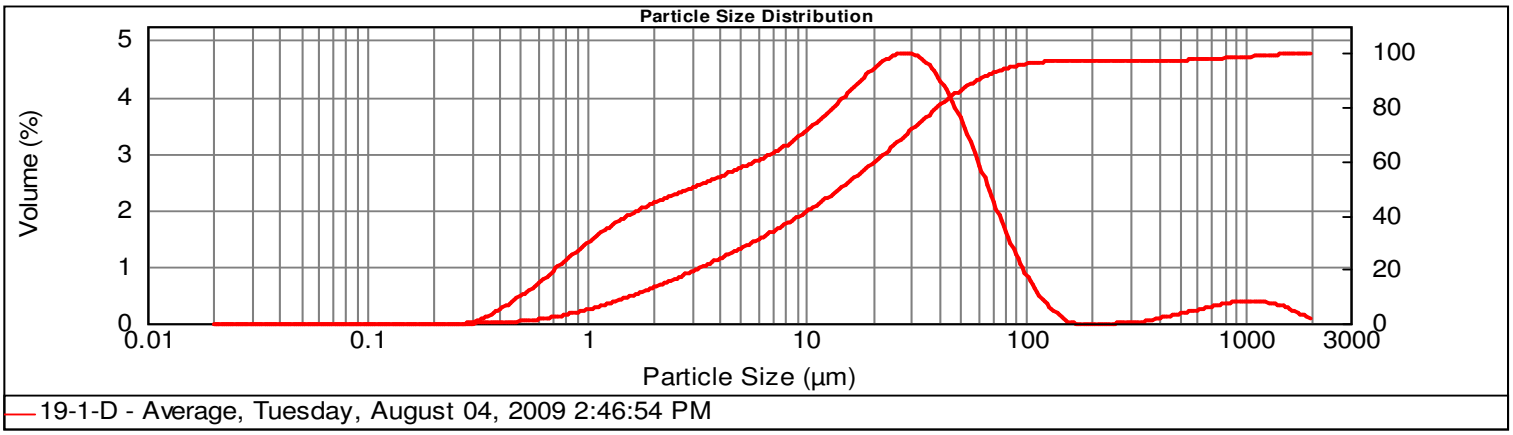
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.41 phi (Silt)

USGS
% Clay (0-2 um) = 13.09
% Fine Silt (2-3.9 um) = 10.22

d (0.1) : 1.584 um
d (0.5) : 14.383
d (0.9) : 60.172

Wentworth
% Clay (0-3.9 um) = 23.31
% Silt (3.91-31 um) = 49.22
% Coarse Silt (31 - 62.5 um) = 18.17
% Very Fine sand (62.5 - 125 um) = 6.16

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = 1.32
% Very Coarse sand (1000 - 2000 um) = 1.31



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.47	100
-0.5	(1414.21)	0.0	(1000.00)	0.84	99.53
0.0	(1000.00)	0.5	(707.10)	0.8	98.69
0.5	(707.10)	1.0	(500.00)	0.52	97.89
1.0	(500.00)	1.5	(353.55)	0.24	97.37
1.5	(353.55)	2.0	(250.00)	0.04	97.13
2.0	(250.00)	2.5	(176.78)	0	97.09
2.5	(176.78)	3.0	(125.00)	0.23	97.09
3.0	(125.00)	3.5	(88.39)	1.69	96.86
3.5	(88.39)	4.0	(62.50)	4.47	95.17
4.0	(62.50)	4.5	(44.19)	7.78	90.69
4.5	(44.19)	5.0	(31.25)	10.15	82.92
5.0	(31.25)	5.5	(22.10)	10.72	72.77
5.5	(22.10)	6.0	(15.63)	9.88	62.05
6.0	(15.63)	6.5	(11.05)	8.59	52.17
6.5	(11.05)	7.0	(7.81)	7.48	43.58
7.0	(7.81)	7.5	(5.52)	6.68	36.1
7.5	(5.52)	8.0	(3.90)	6.08	29.42

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.55	23.33
8.5	(2.76)	9.0	(1.95)	5.03	17.79
9.0	(1.95)	9.5	(1.38)	4.42	12.76
9.5	(1.38)	10.0	(0.98)	3.6	8.34
10.0	(0.98)	10.5	(0.69)	2.57	4.73
10.5	(0.69)	11.0	(0.49)	1.51	2.16
11.0	(0.49)	11.5	(0.35)	0.6	0.65
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 19-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:51:45 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.59

D[4,3] = 52.22um = 4.26phi
D[v,0.05] = .99um = 9.99phi
D[v,0.16] = 2.39um = 8.71phi

D[v,0.5] = 14.08um = 6.15phi
D[v,0.84] = 44.11um = 4.5phi
D[v,0.95] = 83.16um = 3.59phi

Kurtosis = 41.72
Skewness = 6.28
Standard Deviation = 187.99 um = 2.41phi

Inclusive SD (Sorting Coeff.) = 2.02 phi (Very Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

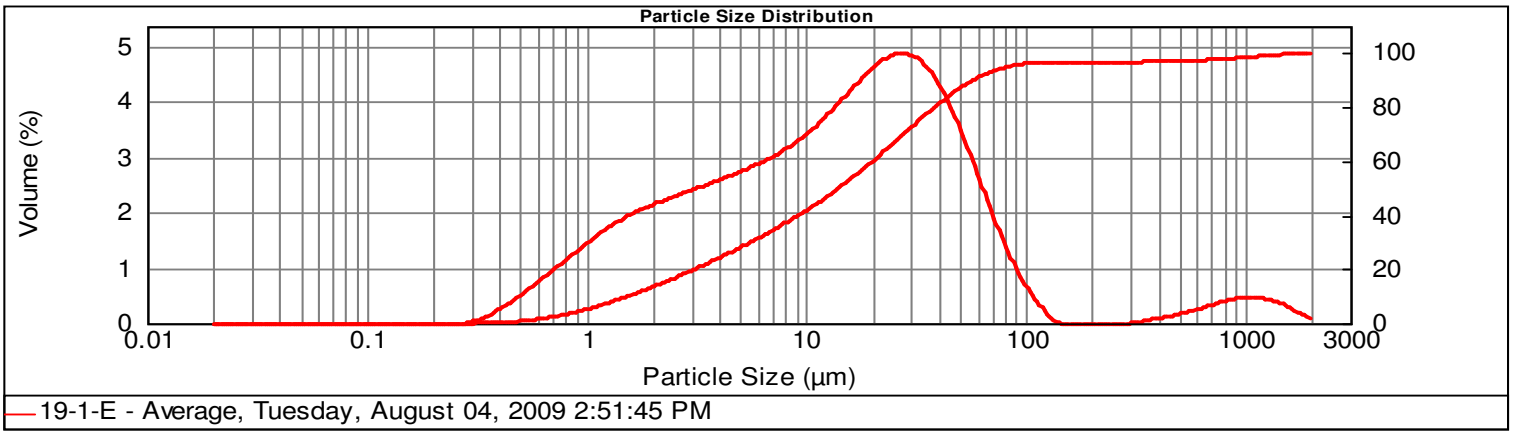
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 13.44
% Fine Silt (2-3.9 um) = 10.29

d (0.1) : 1.546 **um**
d (0.5) : 14.083 **d (0.9) : 57.416**

Wentworth
% Clay (0-3.9 um) = 23.72
% Silt (3.91-31 um) = 49.91
% Coarse Silt (31 - 62.5 um) = 17.87
% Very Fine sand (62.5 - 125 um) = 5.22

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .25
% Coarse sand (500-1000 um) = 1.48
% Very Coarse sand (1000 - 2000 um) = 1.51



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.52	100
-0.5	(1414.21)	0.0	(1000.00)	0.99	99.48
0.0	(1000.00)	0.5	(707.10)	0.93	98.49
0.5	(707.10)	1.0	(500.00)	0.55	97.57
1.0	(500.00)	1.5	(353.55)	0.23	97.01
1.5	(353.55)	2.0	(250.00)	0.02	96.79
2.0	(250.00)	2.5	(176.78)	0	96.77
2.5	(176.78)	3.0	(125.00)	0.04	96.77
3.0	(125.00)	3.5	(88.39)	1.26	96.73
3.5	(88.39)	4.0	(62.50)	3.96	95.46
4.0	(62.50)	4.5	(44.19)	7.45	91.5
4.5	(44.19)	5.0	(31.25)	10.17	84.05
5.0	(31.25)	5.5	(22.10)	10.97	73.88
5.5	(22.10)	6.0	(15.63)	10.14	62.91
6.0	(15.63)	6.5	(11.05)	8.73	52.77
6.5	(11.05)	7.0	(7.81)	7.51	44.03
7.0	(7.81)	7.5	(5.52)	6.68	36.52
7.5	(5.52)	8.0	(3.90)	6.09	29.84
8.0	(3.90)	8.5	(2.76)	5.57	23.75
8.5	(2.76)	9.0	(1.95)	5.07	18.18
9.0	(1.95)	9.5	(1.38)	4.5	13.11
9.5	(1.38)	10.0	(0.98)	3.69	8.61
10.0	(0.98)	10.5	(0.69)	2.66	4.91
10.5	(0.69)	11.0	(0.49)	1.57	2.25
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 19-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 2:56:06 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.81

D[4,3] = 44.65um = 4.49phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.46um = 8.67phi

D[v,0.5] = 13.81um = 6.18phi
D[v,0.84] = 43.98um = 4.51phi
D[v,0.95] = 81.21um = 3.62phi

Kurtosis = 57.63
Skewness = 7.31
Standard Deviation = 163.19 um = 2.62phi

Inclusive SD (Sorting Coeff.) = 2 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

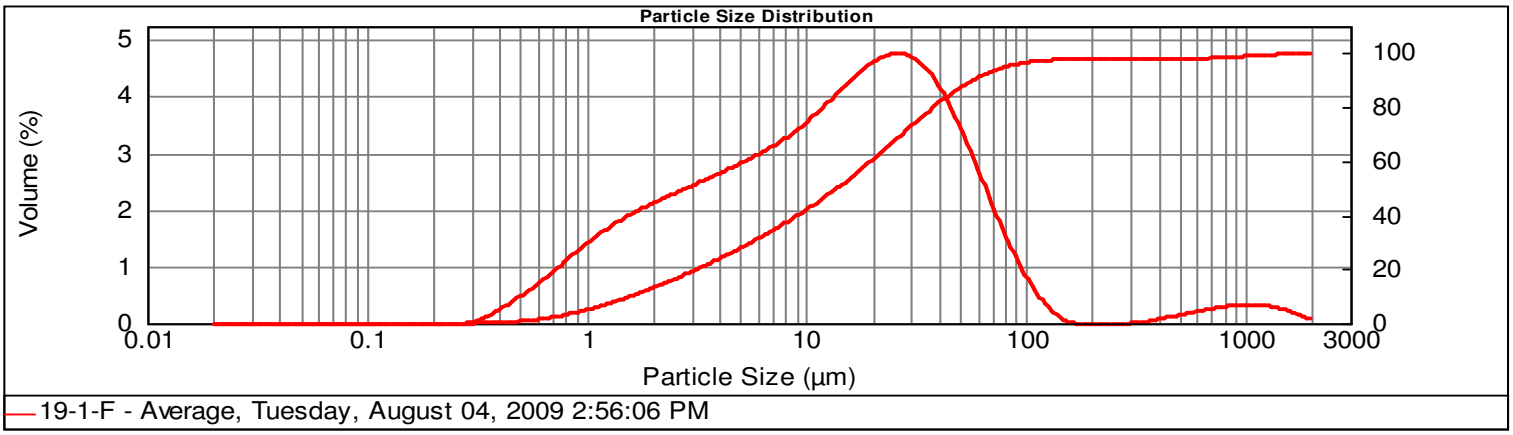
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.45 phi (Silt)

USGS
% Clay (0-2 um) = 13.03
% Fine Silt (2-3.9 um) = 10.33

d (0.1) : 1.591 **um**
d (0.5) : 13.810 **d (0.9) : 57.429**

Wentworth
% Clay (0-3.9 um) = 23.36
% Silt (3.91-31 um) = 50.66
% Coarse Silt (31 - 62.5 um) = 17.49
% Very Fine sand (62.5 - 125 um) = 5.85

% Fine sand (125-250 um) = .2
% Medium sand (250-500 um) = .19
% Coarse sand (500-1000 um) = 1.14
% Very Coarse sand (1000 - 2000 um) = 1.1



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.39	100
-0.5	(1414.21)	0.0	(1000.00)	0.7	99.61
0.0	(1000.00)	0.5	(707.10)	0.69	98.9
0.5	(707.10)	1.0	(500.00)	0.46	98.22
1.0	(500.00)	1.5	(353.55)	0.19	97.76
1.5	(353.55)	2.0	(250.00)	0	97.57
2.0	(250.00)	2.5	(176.78)	0	97.57
2.5	(176.78)	3.0	(125.00)	0.2	97.57
3.0	(125.00)	3.5	(88.39)	1.61	97.37
3.5	(88.39)	4.0	(62.50)	4.24	95.75
4.0	(62.50)	4.5	(44.19)	7.39	91.52
4.5	(44.19)	5.0	(31.25)	9.86	84.13
5.0	(31.25)	5.5	(22.10)	10.74	74.27
5.5	(22.10)	6.0	(15.63)	10.18	63.53
6.0	(15.63)	6.5	(11.05)	8.99	53.35
6.5	(11.05)	7.0	(7.81)	7.81	44.36
7.0	(7.81)	7.5	(5.52)	6.92	36.55
7.5	(5.52)	8.0	(3.90)	6.24	29.63

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.63	23.39
8.5	(2.76)	9.0	(1.95)	5.05	17.76
9.0	(1.95)	9.5	(1.38)	4.42	12.7
9.5	(1.38)	10.0	(0.98)	3.58	8.29
10.0	(0.98)	10.5	(0.69)	2.56	4.7
10.5	(0.69)	11.0	(0.49)	1.5	2.15
11.0	(0.49)	11.5	(0.35)	0.59	0.65
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 20-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:18:56 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.82

D[4,3] = 48.55um = 4.36phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 14.79um = 6.08phi
D[v,0.84] = 45.2um = 4.47phi
D[v,0.95] = 89.04um = 3.49phi

Kurtosis = 49.6
Skewness = 6.69
Standard Deviation = 164.41 um = 2.6phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

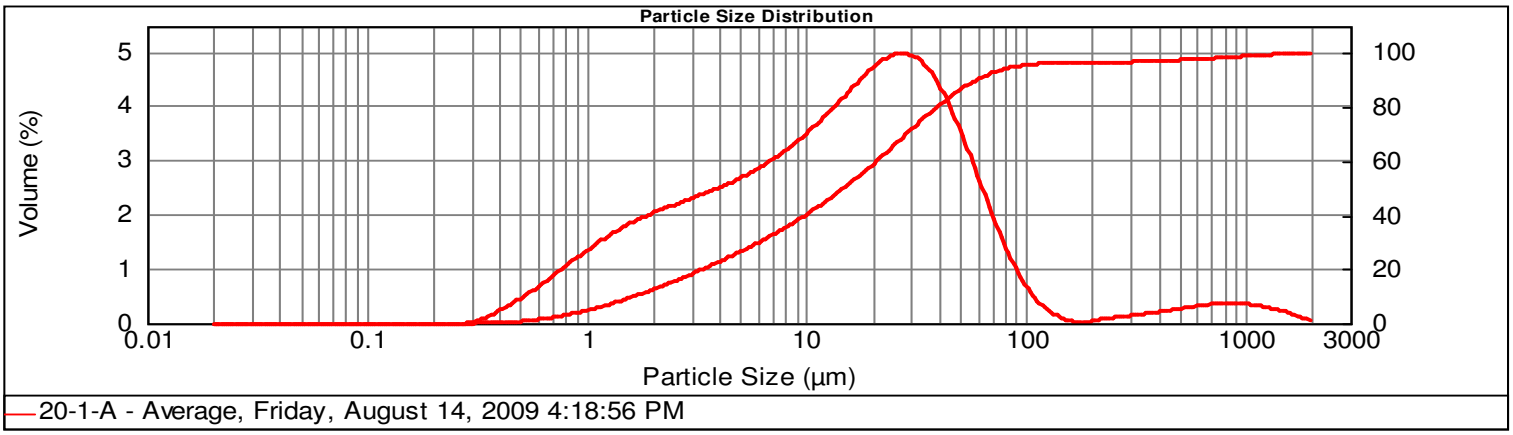
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 12.46
% Fine Silt (2-3.9 um) = 9.82

d (0.1) : 1.650 **um**
d (0.5) : 14.793 **d (0.9) : 59.145**

Wentworth
% Clay (0-3.9 um) = 22.28
% Silt (3.91-31 um) = 50.51
% Coarse Silt (31 - 62.5 um) = 18.17
% Very Fine sand (62.5 - 125 um) = 5.32

% Fine sand (125-250 um) = .34
% Medium sand (250-500 um) = .81
% Coarse sand (500-1000 um) = 1.54
% Very Coarse sand (1000 - 2000 um) = 1.02



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.33	100
-0.5	(1414.21)	0.0	(1000.00)	0.69	99.67
0.0	(1000.00)	0.5	(707.10)	0.83	98.98
0.5	(707.10)	1.0	(500.00)	0.71	98.15
1.0	(500.00)	1.5	(353.55)	0.5	97.44
1.5	(353.55)	2.0	(250.00)	0.32	96.94
2.0	(250.00)	2.5	(176.78)	0.13	96.62
2.5	(176.78)	3.0	(125.00)	0.21	96.49
3.0	(125.00)	3.5	(88.39)	1.33	96.28
3.5	(88.39)	4.0	(62.50)	3.99	94.95
4.0	(62.50)	4.5	(44.19)	7.55	90.96
4.5	(44.19)	5.0	(31.25)	10.36	83.41
5.0	(31.25)	5.5	(22.10)	11.19	73.04
5.5	(22.10)	6.0	(15.63)	10.35	61.86
6.0	(15.63)	6.5	(11.05)	8.95	51.51
6.5	(11.05)	7.0	(7.81)	7.68	42.56
7.0	(7.81)	7.5	(5.52)	6.67	34.88
7.5	(5.52)	8.0	(3.90)	5.91	28.21
8.0	(3.90)	8.5	(2.76)	5.33	22.31
8.5	(2.76)	9.0	(1.95)	4.82	16.97
9.0	(1.95)	9.5	(1.38)	4.23	12.15
9.5	(1.38)	10.0	(0.98)	3.43	7.92
10.0	(0.98)	10.5	(0.69)	2.44	4.49
10.5	(0.69)	11.0	(0.49)	1.43	2.05
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 20-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:23:12 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.61

D[4,3] = 37.65um = 4.73phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.57um = 8.6phi

D[v,0.5] = 15.25um = 6.03phi
D[v,0.84] = 45.86um = 4.45phi
D[v,0.95] = 78.95um = 3.66phi

Kurtosis = 88.04
Skewness = 8.78
Standard Deviation = 124.19 um = 3.01phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

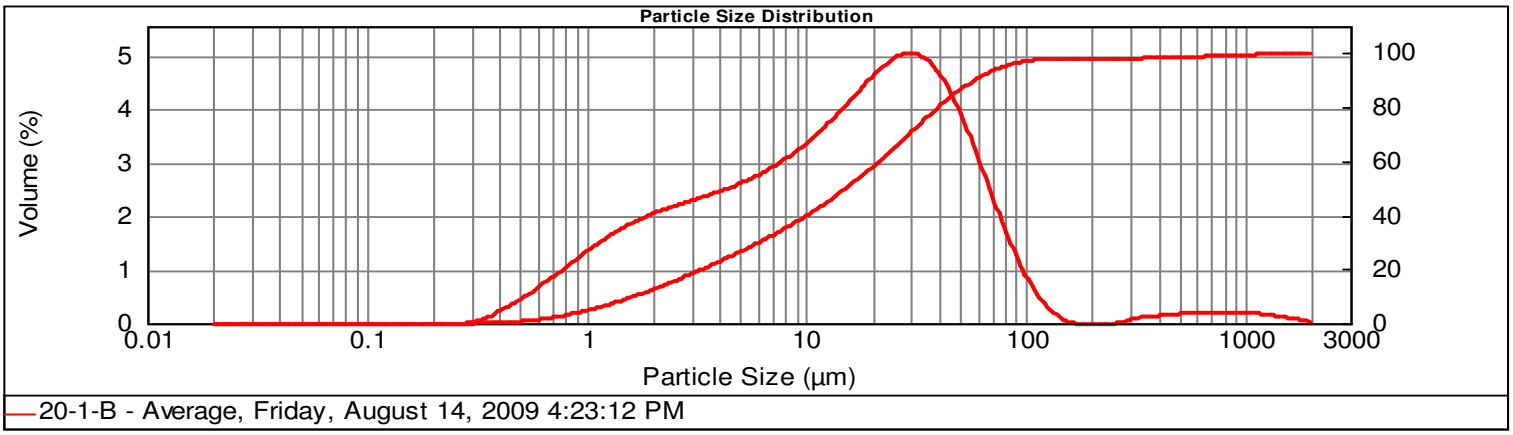
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.36 phi (Silt)

USGS
% Clay (0-2 um) = 12.5
% Fine Silt (2-3.9 um) = 9.82

d (0.1) : 1.647 **um**
d (0.5) : 15.251 **d (0.9) : 58.396**

Wentworth
% Clay (0-3.9 um) = 22.32
% Silt (3.91-31 um) = 49.47
% Coarse Silt (31 - 62.5 um) = 19.59
% Very Fine sand (62.5 - 125 um) = 6.49

% Fine sand (125-250 um) = .2
% Medium sand (250-500 um) = .48
% Coarse sand (500-1000 um) = .9
% Very Coarse sand (1000 - 2000 um) = .56



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.18	100
-0.5	(1414.21)	0.0	(1000.00)	0.38	99.82
0.0	(1000.00)	0.5	(707.10)	0.47	99.44
0.5	(707.10)	1.0	(500.00)	0.43	98.97
1.0	(500.00)	1.5	(353.55)	0.34	98.54
1.5	(353.55)	2.0	(250.00)	0.14	98.2
2.0	(250.00)	2.5	(176.78)	0	98.06
2.5	(176.78)	3.0	(125.00)	0.2	98.06
3.0	(125.00)	3.5	(88.39)	1.71	97.87
3.5	(88.39)	4.0	(62.50)	4.79	96.16
4.0	(62.50)	4.5	(44.19)	8.42	91.37
4.5	(44.19)	5.0	(31.25)	10.9	82.95
5.0	(31.25)	5.5	(22.10)	11.27	72.05
5.5	(22.10)	6.0	(15.63)	10.13	60.78
6.0	(15.63)	6.5	(11.05)	8.64	50.65
6.5	(11.05)	7.0	(7.81)	7.4	42.01
7.0	(7.81)	7.5	(5.52)	6.47	34.62
7.5	(5.52)	8.0	(3.90)	5.8	28.15
8.0	(3.90)	8.5	(2.76)	5.31	22.35
8.5	(2.76)	9.0	(1.95)	4.85	17.04
9.0	(1.95)	9.5	(1.38)	4.27	12.19
9.5	(1.38)	10.0	(0.98)	3.45	7.92
10.0	(0.98)	10.5	(0.69)	2.44	4.47
10.5	(0.69)	11.0	(0.49)	1.42	2.02
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 20-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:28:02 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.49

D[4,3] = 36.19um = 4.79phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.66um = 8.55phi

D[v,0.5] = 14.94um = 6.06phi
D[v,0.84] = 42.32um = 4.56phi
D[v,0.95] = 70.92um = 3.82phi

Kurtosis = 90.62
Skewness = 8.99
Standard Deviation = 126.09 um = 2.99phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

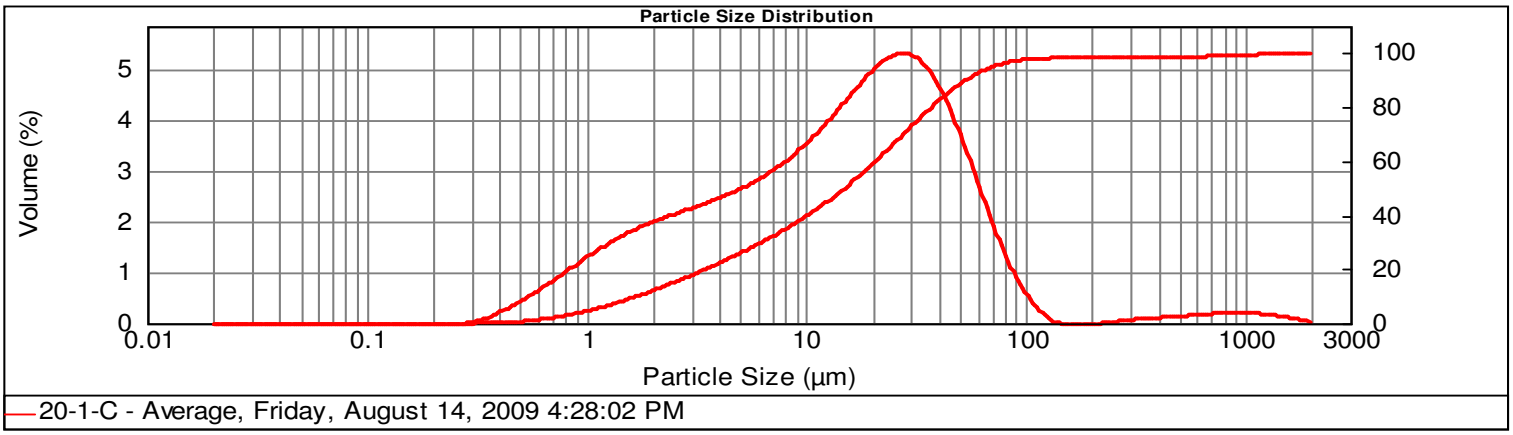
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.1
% Fine Silt (2-3.9 um) = 9.68

d (0.1) : 1.693 **um**
d (0.5) : 14.941 **d (0.9) : 53.280**

Wentworth
% Clay (0-3.9 um) = 21.78
% Silt (3.91-31 um) = 52.13
% Coarse Silt (31 - 62.5 um) = 19.22
% Very Fine sand (62.5 - 125 um) = 5

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .4
% Coarse sand (500-1000 um) = .82
% Very Coarse sand (1000 - 2000 um) = .61



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.2	100
-0.5	(1414.21)	0.0	(1000.00)	0.41	99.8
0.0	(1000.00)	0.5	(707.10)	0.46	99.39
0.5	(707.10)	1.0	(500.00)	0.36	98.94
1.0	(500.00)	1.5	(353.55)	0.26	98.57
1.5	(353.55)	2.0	(250.00)	0.14	98.31
2.0	(250.00)	2.5	(176.78)	0.01	98.17
2.5	(176.78)	3.0	(125.00)	0.03	98.17
3.0	(125.00)	3.5	(88.39)	1.08	98.14
3.5	(88.39)	4.0	(62.50)	3.92	97.06
4.0	(62.50)	4.5	(44.19)	7.89	93.14
4.5	(44.19)	5.0	(31.25)	11.06	85.25
5.0	(31.25)	5.5	(22.10)	11.97	74.19
5.5	(22.10)	6.0	(15.63)	10.93	62.22
6.0	(15.63)	6.5	(11.05)	9.24	51.29
6.5	(11.05)	7.0	(7.81)	7.75	42.05
7.0	(7.81)	7.5	(5.52)	6.64	34.3
7.5	(5.52)	8.0	(3.90)	5.85	27.66
8.0	(3.90)	8.5	(2.76)	5.26	21.81
8.5	(2.76)	9.0	(1.95)	4.75	16.54
9.0	(1.95)	9.5	(1.38)	4.15	11.79
9.5	(1.38)	10.0	(0.98)	3.34	7.64
10.0	(0.98)	10.5	(0.69)	2.36	4.3
10.5	(0.69)	11.0	(0.49)	1.37	1.94
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 20-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:32:22 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.13

D[4,3] = 41.49um = 4.59phi
D[v,0.05] = 1.02um = 9.94phi
D[v,0.16] = 2.48um = 8.65phi

D[v,0.5] = 14.45um = 6.11phi
D[v,0.84] = 44.22um = 4.5phi
D[v,0.95] = 78.3um = 3.67phi

Kurtosis = 67.72
Skewness = 7.85
Standard Deviation = 147.67 um = 2.76phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

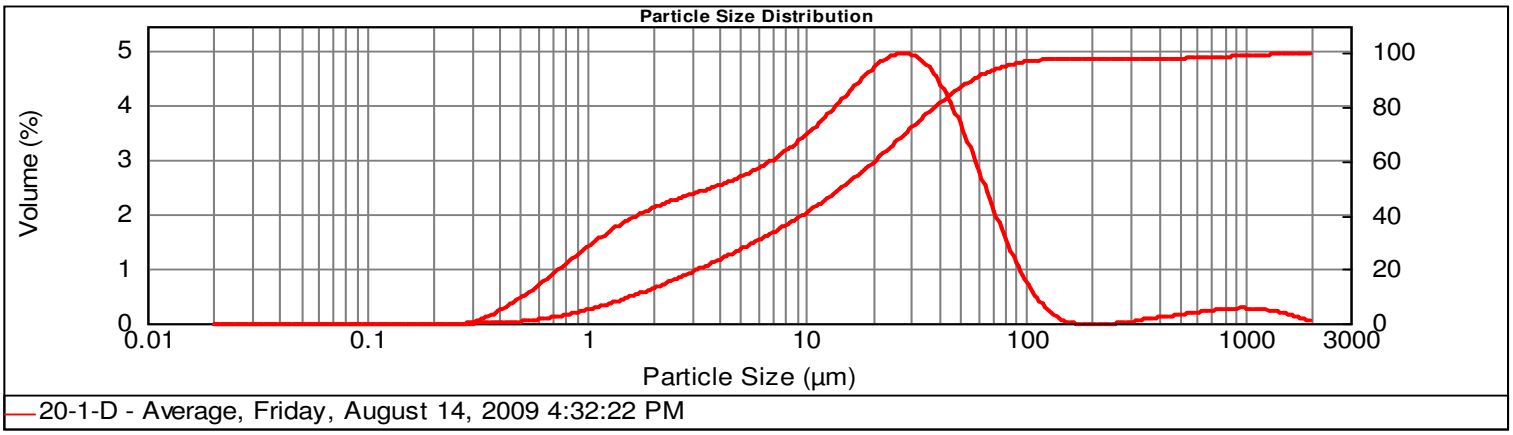
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 12.92
% Fine Silt (2-3.9 um) = 10.12

d (0.1) : 1.604 **um**
d (0.5) : 14.453 **d (0.9) : 56.838**

Wentworth
% Clay (0-3.9 um) = 23.04
% Silt (3.91-31 um) = 50.26
% Coarse Silt (31 - 62.5 um) = 18.51
% Very Fine sand (62.5 - 125 um) = 5.81

% Fine sand (125-250 um) = .15
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = 1.05
% Very Coarse sand (1000 - 2000 um) = .87



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.3	100
-0.5	(1414.21)	0.0	(1000.00)	0.57	99.7
0.0	(1000.00)	0.5	(707.10)	0.6	99.13
0.5	(707.10)	1.0	(500.00)	0.45	98.53
1.0	(500.00)	1.5	(353.55)	0.27	98.09
1.5	(353.55)	2.0	(250.00)	0.06	97.82
2.0	(250.00)	2.5	(176.78)	0	97.76
2.5	(176.78)	3.0	(125.00)	0.15	97.76
3.0	(125.00)	3.5	(88.39)	1.48	97.61
3.5	(88.39)	4.0	(62.50)	4.32	96.13
4.0	(62.50)	4.5	(44.19)	7.82	91.8
4.5	(44.19)	5.0	(31.25)	10.43	83.98
5.0	(31.25)	5.5	(22.10)	11.14	73.55
5.5	(22.10)	6.0	(15.63)	10.29	62.41
6.0	(15.63)	6.5	(11.05)	8.88	52.12
6.5	(11.05)	7.0	(7.81)	7.59	43.25
7.0	(7.81)	7.5	(5.52)	6.63	35.65
7.5	(5.52)	8.0	(3.90)	5.96	29.02

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.47	23.07
8.5	(2.76)	9.0	(1.95)	5	17.59
9.0	(1.95)	9.5	(1.38)	4.4	12.59
9.5	(1.38)	10.0	(0.98)	3.56	8.19
10.0	(0.98)	10.5	(0.69)	2.52	4.63
10.5	(0.69)	11.0	(0.49)	1.47	2.11
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 20-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:36:56 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.51

D[4,3] = 40.05um = 4.64phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.39um = 8.71phi

D[v,0.5] = 13.5um = 6.21phi
D[v,0.84] = 43.96um = 4.51phi
D[v,0.95] = 80.34um = 3.64phi

Kurtosis = 70.42
Skewness = 7.9
Standard Deviation = 138.52 um = 2.85phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

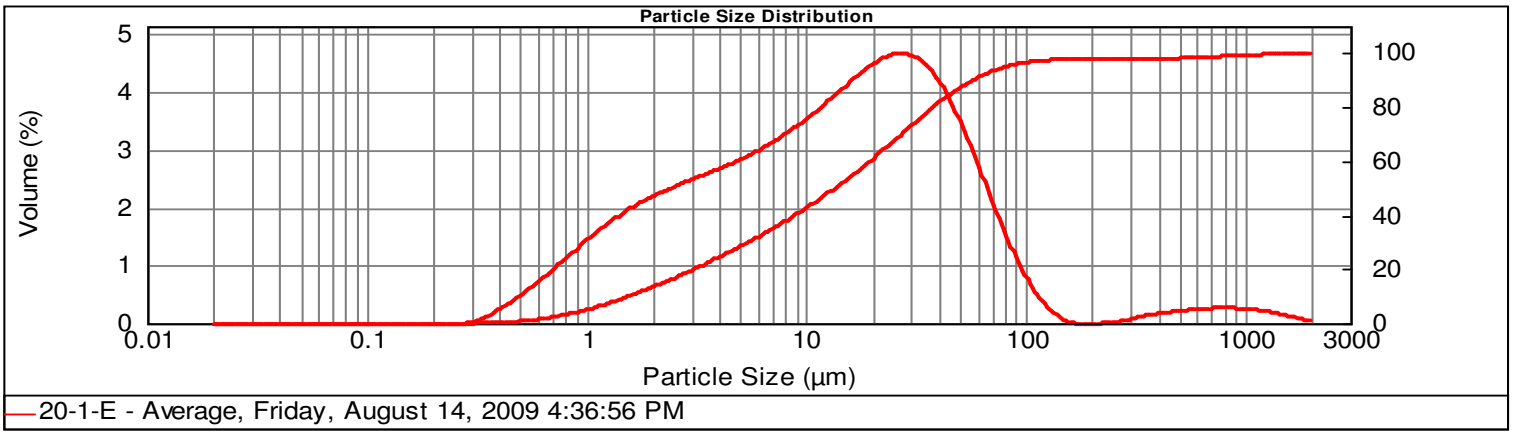
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.48 phi (Silt)

USGS
% Clay (0-2 um) = 13.37
% Fine Silt (2-3.9 um) = 10.6

d (0.1) : 1.562 **um**
d (0.5) : 13.497 **d (0.9) : 57.225**

Wentworth
% Clay (0-3.9 um) = 23.97
% Silt (3.91-31 um) = 50.1
% Coarse Silt (31 - 62.5 um) = 17.53
% Very Fine sand (62.5 - 125 um) = 5.8

% Fine sand (125-250 um) = .2
% Medium sand (250-500 um) = .55
% Coarse sand (500-1000 um) = 1.14
% Very Coarse sand (1000 - 2000 um) = .7



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.22	100
-0.5	(1414.21)	0.0	(1000.00)	0.48	99.78
0.0	(1000.00)	0.5	(707.10)	0.59	99.3
0.5	(707.10)	1.0	(500.00)	0.54	98.7
1.0	(500.00)	1.5	(353.55)	0.4	98.16
1.5	(353.55)	2.0	(250.00)	0.16	97.76
2.0	(250.00)	2.5	(176.78)	0	97.61
2.5	(176.78)	3.0	(125.00)	0.19	97.6
3.0	(125.00)	3.5	(88.39)	1.55	97.41
3.5	(88.39)	4.0	(62.50)	4.25	95.86
4.0	(62.50)	4.5	(44.19)	7.47	91.6
4.5	(44.19)	5.0	(31.25)	9.82	84.14
5.0	(31.25)	5.5	(22.10)	10.52	74.31
5.5	(22.10)	6.0	(15.63)	9.92	63.79
6.0	(15.63)	6.5	(11.05)	8.84	53.87
6.5	(11.05)	7.0	(7.81)	7.8	45.03
7.0	(7.81)	7.5	(5.52)	6.95	37.23
7.5	(5.52)	8.0	(3.90)	6.28	30.28

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.75	23.99
8.5	(2.76)	9.0	(1.95)	5.22	18.25
9.0	(1.95)	9.5	(1.38)	4.57	13.03
9.5	(1.38)	10.0	(0.98)	3.68	8.46
10.0	(0.98)	10.5	(0.69)	2.61	4.78
10.5	(0.69)	11.0	(0.49)	1.52	2.17
11.0	(0.49)	11.5	(0.35)	0.6	0.65
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 20-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:41:20 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.27

D[4,3] = 40.28um = 4.63phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.51um = 8.64phi

D[v,0.5] = 14.72um = 6.09phi
D[v,0.84] = 46.77um = 4.42phi
D[v,0.95] = 82.21um = 3.6phi

Kurtosis = 75.81
Skewness = 8.26
Standard Deviation = 139 um = 2.85phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

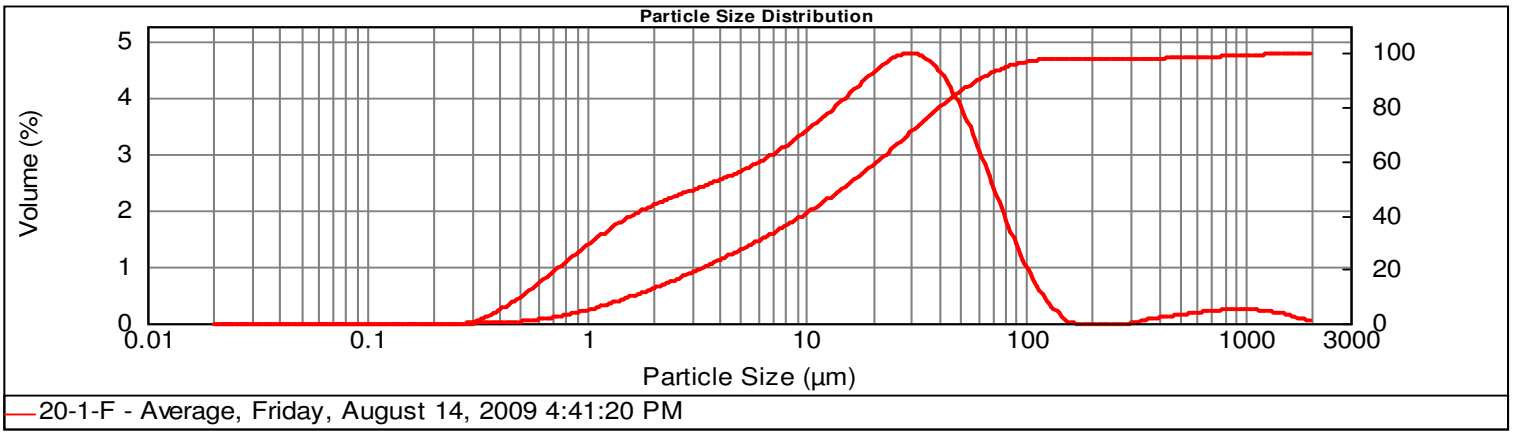
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 12.79
% Fine Silt (2-3.9 um) = 10.07

d (0.1) : 1.616 **um**
d (0.5) : 14.719 **d (0.9) : 60.188**

Wentworth
% Clay (0-3.9 um) = 22.85
% Silt (3.91-31 um) = 48.96
% Coarse Silt (31 - 62.5 um) = 18.94
% Very Fine sand (62.5 - 125 um) = 6.99

% Fine sand (125-250 um) = .27
% Medium sand (250-500 um) = .27
% Coarse sand (500-1000 um) = .96
% Very Coarse sand (1000 - 2000 um) = .76



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.26	100
-0.5	(1414.21)	0.0	(1000.00)	0.5	99.74
0.0	(1000.00)	0.5	(707.10)	0.54	99.24
0.5	(707.10)	1.0	(500.00)	0.42	98.71
1.0	(500.00)	1.5	(353.55)	0.24	98.29
1.5	(353.55)	2.0	(250.00)	0.03	98.04
2.0	(250.00)	2.5	(176.78)	0	98.02
2.5	(176.78)	3.0	(125.00)	0.27	98.02
3.0	(125.00)	3.5	(88.39)	1.98	97.75
3.5	(88.39)	4.0	(62.50)	5.01	95.77
4.0	(62.50)	4.5	(44.19)	8.3	90.75
4.5	(44.19)	5.0	(31.25)	10.4	82.46
5.0	(31.25)	5.5	(22.10)	10.7	72.06
5.5	(22.10)	6.0	(15.63)	9.8	61.36
6.0	(15.63)	6.5	(11.05)	8.58	51.56
6.5	(11.05)	7.0	(7.81)	7.5	42.98
7.0	(7.81)	7.5	(5.52)	6.63	35.48
7.5	(5.52)	8.0	(3.90)	5.97	28.85
8.0	(3.90)	8.5	(2.76)	5.45	22.88
8.5	(2.76)	9.0	(1.95)	4.96	17.43
9.0	(1.95)	9.5	(1.38)	4.35	12.47
9.5	(1.38)	10.0	(0.98)	3.52	8.11
10.0	(0.98)	10.5	(0.69)	2.5	4.59
10.5	(0.69)	11.0	(0.49)	1.46	2.09
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 21-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:42:16 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.01

D[4,3] = 39.74um = 4.65phi
D[v,0.05] = 1.04um = 9.9phi
D[v,0.16] = 2.59um = 8.59phi

D[v,0.5] = 14.96um = 6.06phi
D[v,0.84] = 51.31um = 4.28phi
D[v,0.95] = 133.64um = 2.9phi

Kurtosis = 33.36
Skewness = 5.35
Standard Deviation = 91.7 um = 3.45phi

Inclusive SD (Sorting Coeff.) = 2.14 phi (Very Poorly Sorted)
Inclusive Kurtosis = .96 phi (Mesokurtic)

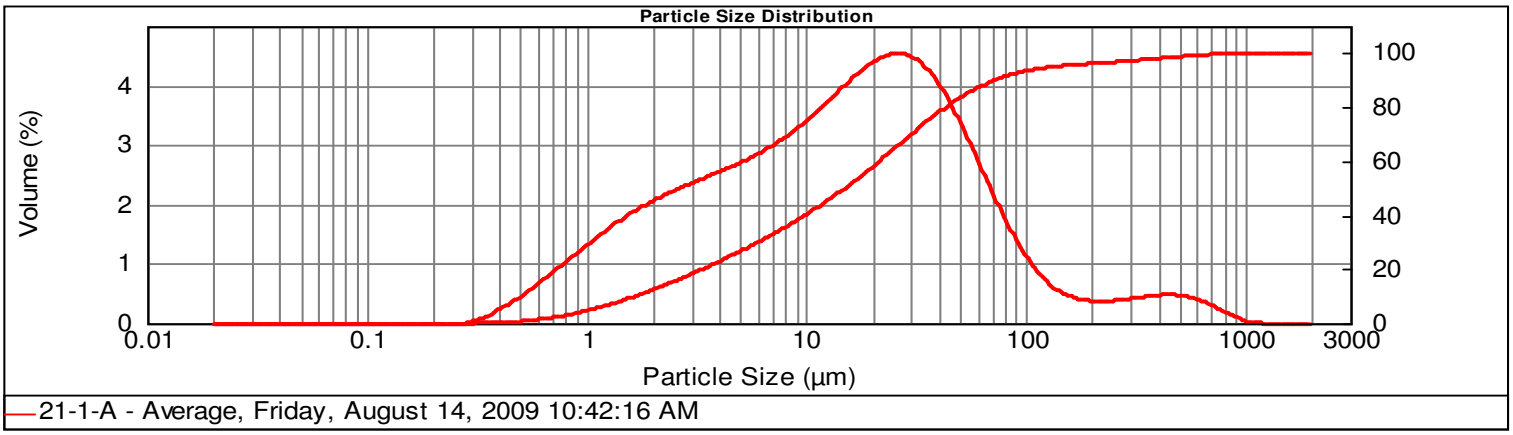
Inclusive Skewness = -0.14 (Coarse Skewed)
Inclusive Mean = 6.31 phi (Silt)

USGS
% Clay (0-2 um) = 12.36
% Fine Silt (2-3.9 um) = 10.04

d (0.1) : 1.666 um
d (0.5) : 14.959
d (0.9) : 71.989

Wentworth
% Clay (0-3.9 um) = 22.4
% Silt (3.91-31 um) = 48.46
% Coarse Silt (31 - 62.5 um) = 16.96
% Very Fine sand (62.5 - 125 um) = 6.9

% Fine sand (125-250 um) = 2.01
% Medium sand (250-500 um) = 2
% Coarse sand (500-1000 um) = 1.26
% Very Coarse sand (1000 - 2000 um) = .01



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.01	100
0.0	(1000.00)	0.5	(707.10)	0.36	99.99
0.5	(707.10)	1.0	(500.00)	0.91	99.64
1.0	(500.00)	1.5	(353.55)	1.07	98.73
1.5	(353.55)	2.0	(250.00)	0.93	97.66
2.0	(250.00)	2.5	(176.78)	0.86	96.73
2.5	(176.78)	3.0	(125.00)	1.16	95.88
3.0	(125.00)	3.5	(88.39)	2.34	94.72
3.5	(88.39)	4.0	(62.50)	4.56	92.38
4.0	(62.50)	4.5	(44.19)	7.28	87.82
4.5	(44.19)	5.0	(31.25)	9.44	80.54
5.0	(31.25)	5.5	(22.10)	10.23	71.1
5.5	(22.10)	6.0	(15.63)	9.72	60.86
6.0	(15.63)	6.5	(11.05)	8.6	51.15
6.5	(11.05)	7.0	(7.81)	7.5	42.54
7.0	(7.81)	7.5	(5.52)	6.63	35.05
7.5	(5.52)	8.0	(3.90)	5.99	28.41
8.0	(3.90)	8.5	(2.76)	5.47	22.43
8.5	(2.76)	9.0	(1.95)	4.92	16.96
9.0	(1.95)	9.5	(1.38)	4.24	12.04
9.5	(1.38)	10.0	(0.98)	3.38	7.8
10.0	(0.98)	10.5	(0.69)	2.39	4.42
10.5	(0.69)	11.0	(0.49)	1.4	2.03
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 21-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:46:53 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.34

D[4,3] = 23.75um = 5.4phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 15.63um = 6phi
D[v,0.84] = 46.24um = 4.43phi
D[v,0.95] = 73.97um = 3.76phi

Kurtosis = 3.32
Skewness = 1.66
Standard Deviation = 24.78 um = 5.33phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

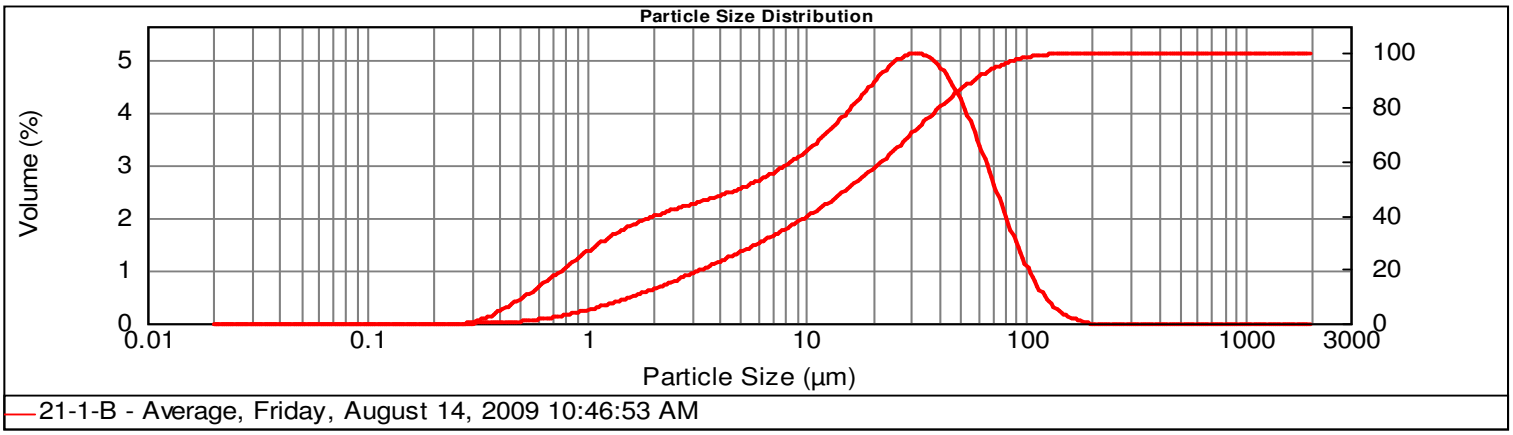
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.35 phi (Silt)

USGS
% Clay (0-2 um) = 12.59
% Fine Silt (2-3.9 um) = 9.7

d (0.1) : 1.632 **um**
d (0.5) : 15.627 **d (0.9) : 57.711**

Wentworth
% Clay (0-3.9 um) = 22.3
% Silt (3.91-31 um) = 48.74
% Coarse Silt (31 - 62.5 um) = 20.79
% Very Fine sand (62.5 - 125 um) = 7.73

% Fine sand (125-250 um) = .45
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.45	100
3.0	(125.00)	3.5	(88.39)	2.19	99.55
3.5	(88.39)	4.0	(62.50)	5.55	97.37
4.0	(62.50)	4.5	(44.19)	9.19	91.82
4.5	(44.19)	5.0	(31.25)	11.33	82.63
5.0	(31.25)	5.5	(22.10)	11.32	71.3
5.5	(22.10)	6.0	(15.63)	9.99	59.98
6.0	(15.63)	6.5	(11.05)	8.44	50
6.5	(11.05)	7.0	(7.81)	7.21	41.55
7.0	(7.81)	7.5	(5.52)	6.32	34.34
7.5	(5.52)	8.0	(3.90)	5.69	28.02
8.0	(3.90)	8.5	(2.76)	5.24	22.32
8.5	(2.76)	9.0	(1.95)	4.8	17.08
9.0	(1.95)	9.5	(1.38)	4.25	12.28
9.5	(1.38)	10.0	(0.98)	3.47	8.03
10.0	(0.98)	10.5	(0.69)	2.48	4.56
10.5	(0.69)	11.0	(0.49)	1.45	2.08
11.0	(0.49)	11.5	(0.35)	0.58	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 21-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:51:22 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 23.35

D[4,3] = 44.03um = 4.51phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.47um = 8.66phi

D[v,0.5] = 14.74um = 6.08phi
D[v,0.84] = 45.98um = 4.44phi
D[v,0.95] = 81.89um = 3.61phi

Kurtosis = 61.69
Skewness = 7.48
Standard Deviation = 153.62 um = 2.7phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

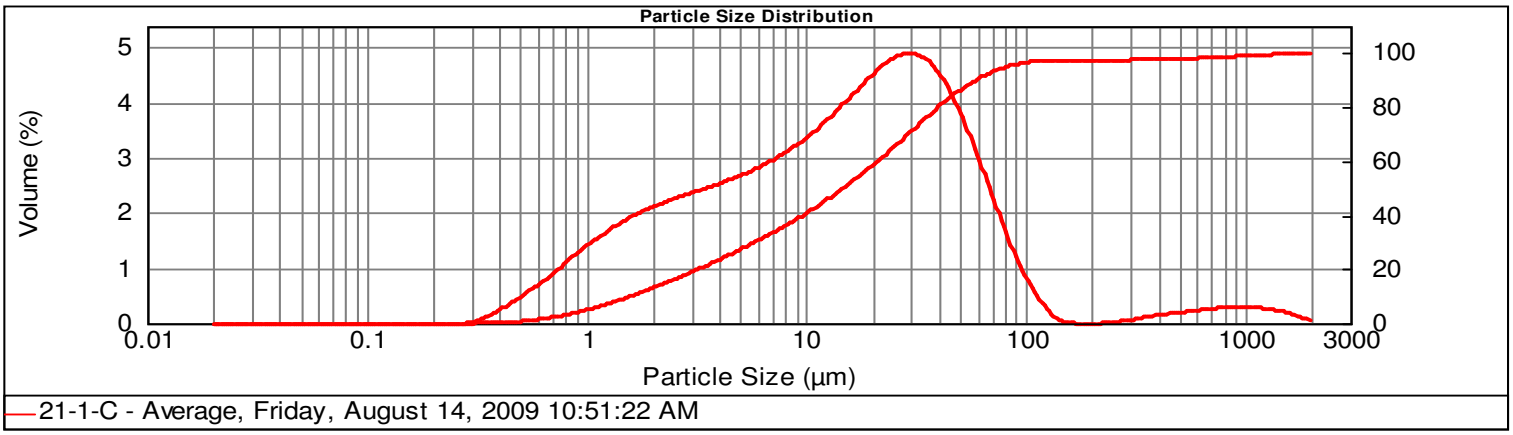
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.4 phi (Silt)

USGS
% Clay (0-2 um) = 12.98
% Fine Silt (2-3.9 um) = 10.1

d (0.1) : 1.596 um
d (0.5) : 14.737
d (0.9) : 59.114

Wentworth
% Clay (0-3.9 um) = 23.08
% Silt (3.91-31 um) = 49.03
% Coarse Silt (31 - 62.5 um) = 18.98
% Very Fine sand (62.5 - 125 um) = 6.22

% Fine sand (125-250 um) = .13
% Medium sand (250-500 um) = .48
% Coarse sand (500-1000 um) = 1.16
% Very Coarse sand (1000 - 2000 um) = .93



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.32	100
-0.5	(1414.21)	0.0	(1000.00)	0.61	99.68
0.0	(1000.00)	0.5	(707.10)	0.64	99.07
0.5	(707.10)	1.0	(500.00)	0.52	98.43
1.0	(500.00)	1.5	(353.55)	0.35	97.91
1.5	(353.55)	2.0	(250.00)	0.13	97.56
2.0	(250.00)	2.5	(176.78)	0.01	97.43
2.5	(176.78)	3.0	(125.00)	0.12	97.42
3.0	(125.00)	3.5	(88.39)	1.59	97.3
3.5	(88.39)	4.0	(62.50)	4.63	95.72
4.0	(62.50)	4.5	(44.19)	8.17	91.09
4.5	(44.19)	5.0	(31.25)	10.55	82.91
5.0	(31.25)	5.5	(22.10)	10.92	72.36
5.5	(22.10)	6.0	(15.63)	9.9	61.44
6.0	(15.63)	6.5	(11.05)	8.54	51.54
6.5	(11.05)	7.0	(7.81)	7.4	42.99
7.0	(7.81)	7.5	(5.52)	6.55	35.59
7.5	(5.52)	8.0	(3.90)	5.93	29.03
8.0	(3.90)	8.5	(2.76)	5.46	23.11
8.5	(2.76)	9.0	(1.95)	5	17.65
9.0	(1.95)	9.5	(1.38)	4.41	12.65
9.5	(1.38)	10.0	(0.98)	3.57	8.25
10.0	(0.98)	10.5	(0.69)	2.54	4.67
10.5	(0.69)	11.0	(0.49)	1.49	2.13
11.0	(0.49)	11.5	(0.35)	0.59	0.65
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 21-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 10:55:48 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.50

D[4,3] = 22.02um = 5.5phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.51um = 8.64phi

D[v,0.5] = 14.16um = 6.14phi
D[v,0.84] = 43.18um = 4.53phi
D[v,0.95] = 69.65um = 3.84phi

Kurtosis = 2.77
Skewness = 1.61
Standard Deviation = 23 um = 5.44phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

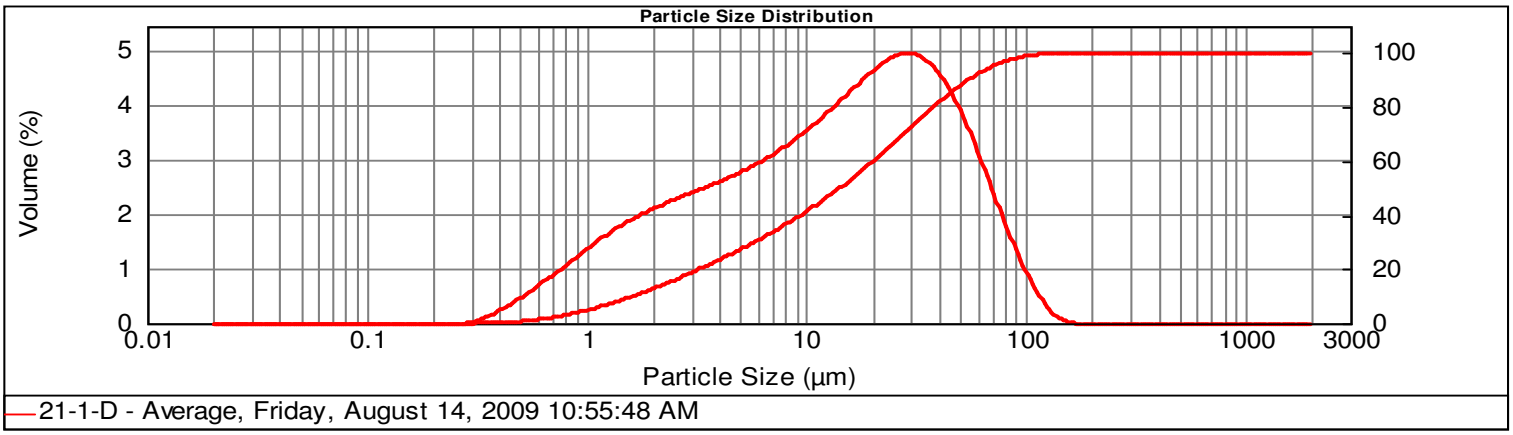
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 12.75
% Fine Silt (2-3.9 um) = 10.21

d (0.1) : 1.622 **um**
d (0.5) : 14.159 **d (0.9) : 54.215**

Wentworth
% Clay (0-3.9 um) = 22.96
% Silt (3.91-31 um) = 50.76
% Coarse Silt (31 - 62.5 um) = 19.35
% Very Fine sand (62.5 - 125 um) = 6.77

% Fine sand (125-250 um) = .16
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.16	100
3.0	(125.00)	3.5	(88.39)	1.82	99.84
3.5	(88.39)	4.0	(62.50)	4.95	98.01
4.0	(62.50)	4.5	(44.19)	8.4	93.07
4.5	(44.19)	5.0	(31.25)	10.68	84.66
5.0	(31.25)	5.5	(22.10)	11.1	73.98
5.5	(22.10)	6.0	(15.63)	10.21	62.88
6.0	(15.63)	6.5	(11.05)	8.93	52.67
6.5	(11.05)	7.0	(7.81)	7.77	43.74
7.0	(7.81)	7.5	(5.52)	6.85	35.97
7.5	(5.52)	8.0	(3.90)	6.13	29.12

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.56	22.99
8.5	(2.76)	9.0	(1.95)	5	17.43
9.0	(1.95)	9.5	(1.38)	4.35	12.43
9.5	(1.38)	10.0	(0.98)	3.5	8.08
10.0	(0.98)	10.5	(0.69)	2.48	4.58
10.5	(0.69)	11.0	(0.49)	1.45	2.09
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 21-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 11:00:19 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.31

D[4,3] = 50.7um = 4.3phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 15.32um = 6.03phi
D[v,0.84] = 50.31um = 4.31phi
D[v,0.95] = 92.81um = 3.43phi

Kurtosis = 49.14
Skewness = 6.75
Standard Deviation = 174.41 um = 2.52phi

Inclusive SD (Sorting Coeff.) = 2.06 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

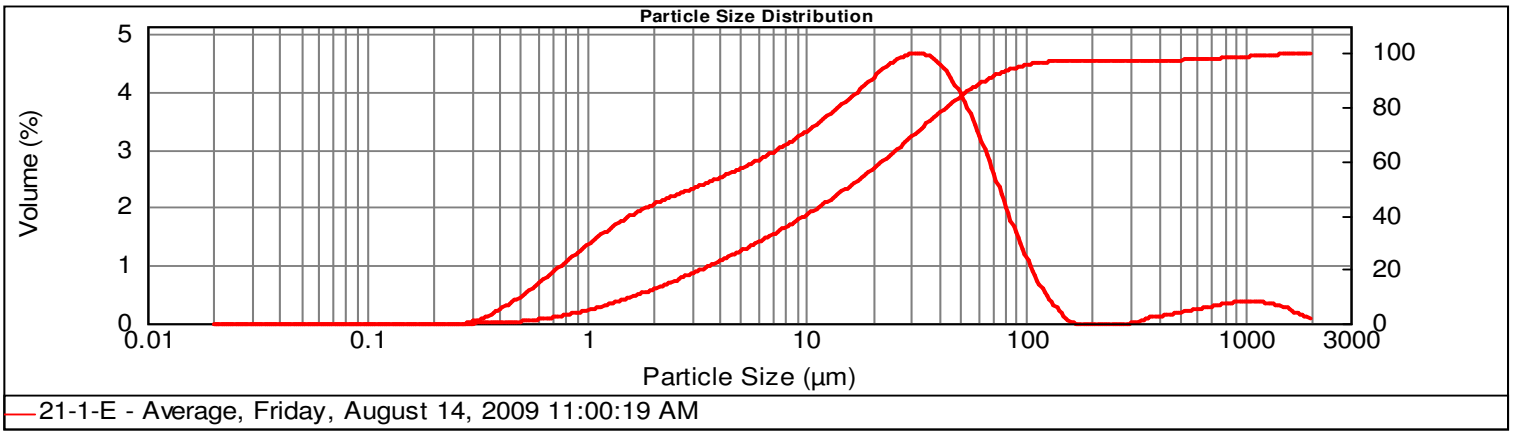
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.32 phi (Silt)

USGS
% Clay (0-2 um) = 12.54
% Fine Silt (2-3.9 um) = 9.93

d (0.1) : 1.642 um
d (0.5) : 15.316
d (0.9) : 65.433

Wentworth
% Clay (0-3.9 um) = 22.47
% Silt (3.91-31 um) = 47.43
% Coarse Silt (31 - 62.5 um) = 19.18
% Very Fine sand (62.5 - 125 um) = 7.67

% Fine sand (125-250 um) = .34
% Medium sand (250-500 um) = .34
% Coarse sand (500-1000 um) = 1.31
% Very Coarse sand (1000 - 2000 um) = 1.26



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.45	100
-0.5	(1414.21)	0.0	(1000.00)	0.81	99.55
0.0	(1000.00)	0.5	(707.10)	0.77	98.74
0.5	(707.10)	1.0	(500.00)	0.54	97.97
1.0	(500.00)	1.5	(353.55)	0.3	97.43
1.5	(353.55)	2.0	(250.00)	0.04	97.13
2.0	(250.00)	2.5	(176.78)	0	97.09
2.5	(176.78)	3.0	(125.00)	0.34	97.09
3.0	(125.00)	3.5	(88.39)	2.24	96.75
3.5	(88.39)	4.0	(62.50)	5.43	94.51
4.0	(62.50)	4.5	(44.19)	8.6	89.08
4.5	(44.19)	5.0	(31.25)	10.33	80.48
5.0	(31.25)	5.5	(22.10)	10.31	70.15
5.5	(22.10)	6.0	(15.63)	9.33	59.84
6.0	(15.63)	6.5	(11.05)	8.24	50.5
6.5	(11.05)	7.0	(7.81)	7.31	42.27
7.0	(7.81)	7.5	(5.52)	6.54	34.95
7.5	(5.52)	8.0	(3.90)	5.92	28.41

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.39	22.49
8.5	(2.76)	9.0	(1.95)	4.88	17.1
9.0	(1.95)	9.5	(1.38)	4.26	12.22
9.5	(1.38)	10.0	(0.98)	3.44	7.96
10.0	(0.98)	10.5	(0.69)	2.45	4.52
10.5	(0.69)	11.0	(0.49)	1.44	2.08
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 21-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:03:14 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.58

D[4,3] = 28.61um = 5.13phi
D[v,0.05] = 1.02um = 9.94phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 14.6um = 6.1phi
D[v,0.84] = 44.17um = 4.5phi
D[v,0.95] = 72.38um = 3.79phi

Kurtosis = 98.32
Skewness = 9.25
Standard Deviation = 71.86 um = 3.8phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

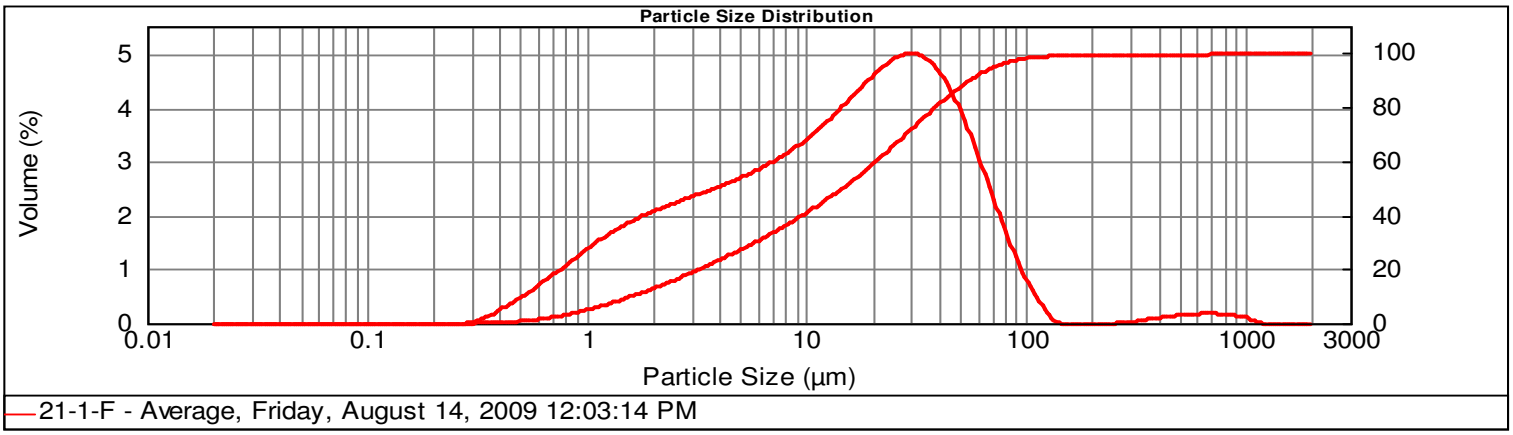
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.41 phi (Silt)

USGS
% Clay (0-2 um) = 12.83
% Fine Silt (2-3.9 um) = 10.06

d (0.1) : 1.609 **um**
d (0.5) : 14.603 **d (0.9) : 55.537**

Wentworth
% Clay (0-3.9 um) = 22.89
% Silt (3.91-31 um) = 49.96
% Coarse Silt (31 - 62.5 um) = 19.65
% Very Fine sand (62.5 - 125 um) = 6.35

% Fine sand (125-250 um) = .05
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = .74
% Very Coarse sand (1000 - 2000 um) = .06



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.06	100
0.0	(1000.00)	0.5	(707.10)	0.35	99.94
0.5	(707.10)	1.0	(500.00)	0.38	99.59
1.0	(500.00)	1.5	(353.55)	0.25	99.21
1.5	(353.55)	2.0	(250.00)	0.05	98.96
2.0	(250.00)	2.5	(176.78)	0	98.91
2.5	(176.78)	3.0	(125.00)	0.05	98.91
3.0	(125.00)	3.5	(88.39)	1.57	98.86
3.5	(88.39)	4.0	(62.50)	4.78	97.29
4.0	(62.50)	4.5	(44.19)	8.49	92.51
4.5	(44.19)	5.0	(31.25)	10.9	84.01
5.0	(31.25)	5.5	(22.10)	11.2	73.12
5.5	(22.10)	6.0	(15.63)	10.11	61.92
6.0	(15.63)	6.5	(11.05)	8.71	51.81
6.5	(11.05)	7.0	(7.81)	7.54	43.1
7.0	(7.81)	7.5	(5.52)	6.65	35.56
7.5	(5.52)	8.0	(3.90)	5.99	28.91
8.0	(3.90)	8.5	(2.76)	5.46	22.92
8.5	(2.76)	9.0	(1.95)	4.95	17.46
9.0	(1.95)	9.5	(1.38)	4.34	12.51
9.5	(1.38)	10.0	(0.98)	3.52	8.17
10.0	(0.98)	10.5	(0.69)	2.52	4.65
10.5	(0.69)	11.0	(0.49)	1.48	2.13
11.0	(0.49)	11.5	(0.35)	0.59	0.65
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 22-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:08:08 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.06

D[4,3] = 46.05um = 4.44phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.6um = 8.59phi

D[v,0.5] = 15.68um = 6phi
D[v,0.84] = 50.38um = 4.31phi
D[v,0.95] = 95.55um = 3.39phi

Kurtosis = 63.36
Skewness = 7.54
Standard Deviation = 152.88 um = 2.71phi

Inclusive SD (Sorting Coeff.) = 2.06 phi (Very Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

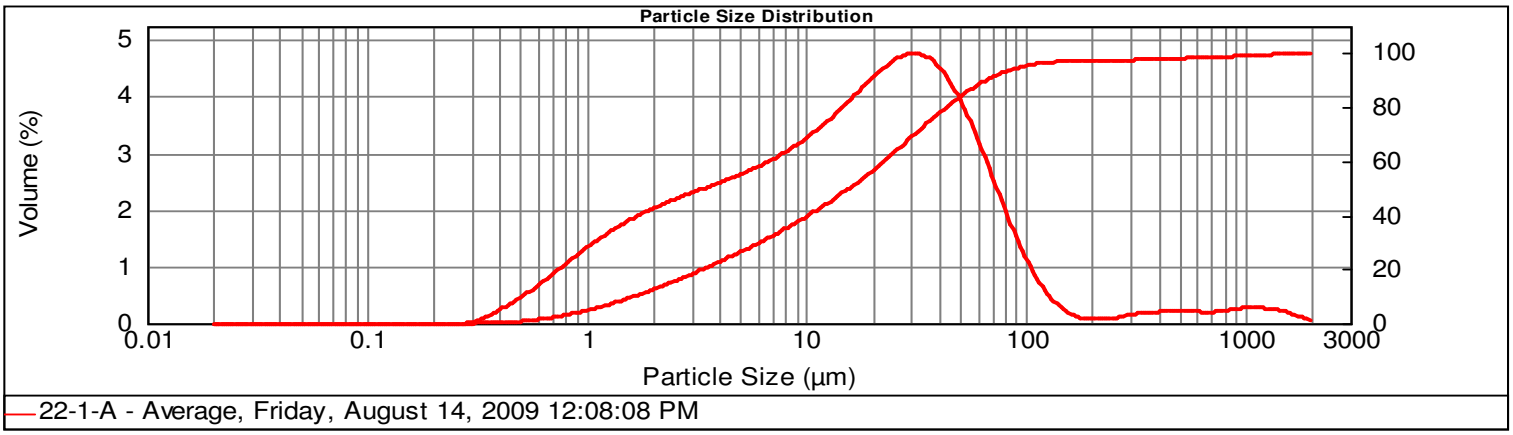
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.3 phi (Silt)

USGS
% Clay (0-2 um) = 12.39
% Fine Silt (2-3.9 um) = 9.8

d (0.1) : 1.656 **um**
d (0.5) : 15.679 **d (0.9) : 65.919**

Wentworth
% Clay (0-3.9 um) = 22.19
% Silt (3.91-31 um) = 47.57
% Coarse Silt (31 - 62.5 um) = 19.2
% Very Fine sand (62.5 - 125 um) = 7.57

% Fine sand (125-250 um) = .76
% Medium sand (250-500 um) = .78
% Coarse sand (500-1000 um) = 1
% Very Coarse sand (1000 - 2000 um) = .93



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.33	100
-0.5	(1414.21)	0.0	(1000.00)	0.6	99.67
0.0	(1000.00)	0.5	(707.10)	0.53	99.07
0.5	(707.10)	1.0	(500.00)	0.46	98.53
1.0	(500.00)	1.5	(353.55)	0.46	98.07
1.5	(353.55)	2.0	(250.00)	0.32	97.61
2.0	(250.00)	2.5	(176.78)	0.17	97.29
2.5	(176.78)	3.0	(125.00)	0.58	97.12
3.0	(125.00)	3.5	(88.39)	2.28	96.54
3.5	(88.39)	4.0	(62.50)	5.3	94.26
4.0	(62.50)	4.5	(44.19)	8.5	88.96
4.5	(44.19)	5.0	(31.25)	10.45	80.46
5.0	(31.25)	5.5	(22.10)	10.57	70.01
5.5	(22.10)	6.0	(15.63)	9.53	59.44
6.0	(15.63)	6.5	(11.05)	8.25	49.91
6.5	(11.05)	7.0	(7.81)	7.2	41.66
7.0	(7.81)	7.5	(5.52)	6.42	34.46
7.5	(5.52)	8.0	(3.90)	5.83	28.04
8.0	(3.90)	8.5	(2.76)	5.32	22.22
8.5	(2.76)	9.0	(1.95)	4.81	16.89
9.0	(1.95)	9.5	(1.38)	4.2	12.08
9.5	(1.38)	10.0	(0.98)	3.4	7.88
10.0	(0.98)	10.5	(0.69)	2.43	4.48
10.5	(0.69)	11.0	(0.49)	1.43	2.06
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 22-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:13:26 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.41

D[4,3] = 33.38um = 4.91phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.54um = 8.62phi

D[v,0.5] = 15.67um = 6phi
D[v,0.84] = 46.89um = 4.41phi
D[v,0.95] = 77.64um = 3.69phi

Kurtosis = 116.34
Skewness = 9.97
Standard Deviation = 100.08 um = 3.32phi

Inclusive SD (Sorting Coeff.) = 2 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

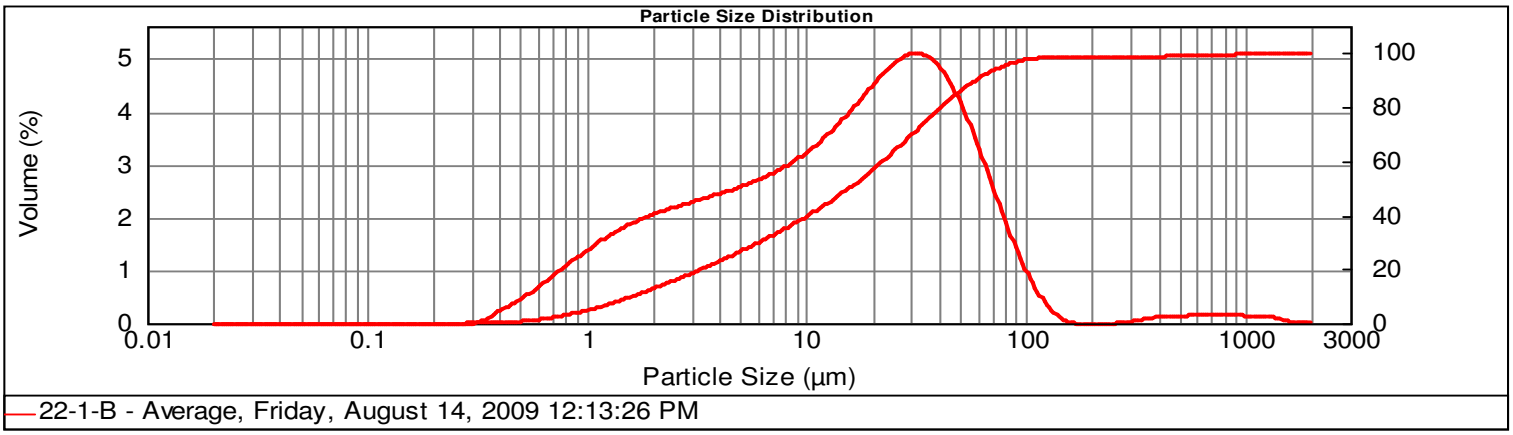
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 12.66
% Fine Silt (2-3.9 um) = 9.81

d (0.1) : 1.628 **um**
d (0.5) : 15.667 **d (0.9) : 59.027**

Wentworth
% Clay (0-3.9 um) = 22.48
% Silt (3.91-31 um) = 48.25
% Coarse Silt (31 - 62.5 um) = 20.52
% Very Fine sand (62.5 - 125 um) = 7.18

% Fine sand (125-250 um) = .21
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = .67
% Very Coarse sand (1000 - 2000 um) = .35



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.07	100
-0.5	(1414.21)	0.0	(1000.00)	0.28	99.93
0.0	(1000.00)	0.5	(707.10)	0.34	99.65
0.5	(707.10)	1.0	(500.00)	0.33	99.31
1.0	(500.00)	1.5	(353.55)	0.26	98.98
1.5	(353.55)	2.0	(250.00)	0.07	98.71
2.0	(250.00)	2.5	(176.78)	0	98.64
2.5	(176.78)	3.0	(125.00)	0.21	98.64
3.0	(125.00)	3.5	(88.39)	1.91	98.43
3.5	(88.39)	4.0	(62.50)	5.27	96.52
4.0	(62.50)	4.5	(44.19)	9.01	91.25
4.5	(44.19)	5.0	(31.25)	11.25	82.24
5.0	(31.25)	5.5	(22.10)	11.23	71
5.5	(22.10)	6.0	(15.63)	9.83	59.76
6.0	(15.63)	6.5	(11.05)	8.28	49.93
6.5	(11.05)	7.0	(7.81)	7.11	41.65
7.0	(7.81)	7.5	(5.52)	6.3	34.54
7.5	(5.52)	8.0	(3.90)	5.74	28.24

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.3	22.5
8.5	(2.76)	9.0	(1.95)	4.86	17.21
9.0	(1.95)	9.5	(1.38)	4.31	12.35
9.5	(1.38)	10.0	(0.98)	3.51	8.04
10.0	(0.98)	10.5	(0.69)	2.5	4.53
10.5	(0.69)	11.0	(0.49)	1.45	2.02
11.0	(0.49)	11.5	(0.35)	0.55	0.58
11.5	(0.35)	12.0	(0.24)	0.03	0.03
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 22-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:17:53 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.36

D[4,3] = 37.55um = 4.73phi
D[v,0.05] = 1.01um = 9.96phi
D[v,0.16] = 2.49um = 8.65phi

D[v,0.5] = 15.33um = 6.03phi
D[v,0.84] = 44.17um = 4.5phi
D[v,0.95] = 73.43um = 3.77phi

Kurtosis = 85.84
Skewness = 8.77
Standard Deviation = 130.32 um = 2.94phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

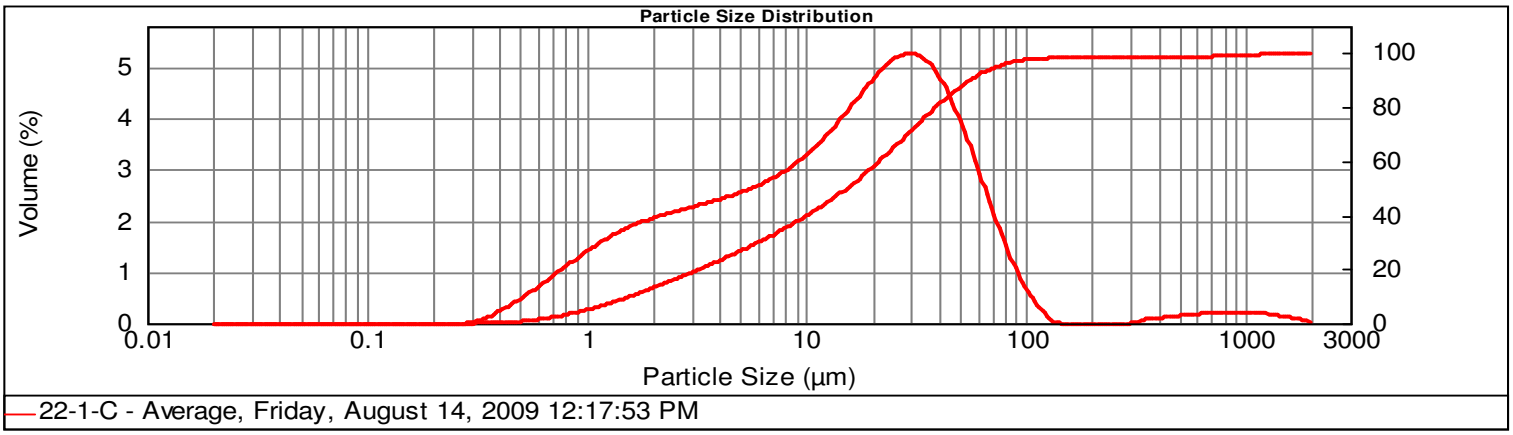
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.97
% Fine Silt (2-3.9 um) = 9.75

d (0.1) : 1.590 **um**
d (0.5) : 15.326 **d (0.9) : 55.486**

Wentworth
% Clay (0-3.9 um) = 22.72
% Silt (3.91-31 um) = 49.7
% Coarse Silt (31 - 62.5 um) = 20.03
% Very Fine sand (62.5 - 125 um) = 5.69

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = .88
% Very Coarse sand (1000 - 2000 um) = .65



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.22	100
-0.5	(1414.21)	0.0	(1000.00)	0.43	99.78
0.0	(1000.00)	0.5	(707.10)	0.49	99.35
0.5	(707.10)	1.0	(500.00)	0.39	98.86
1.0	(500.00)	1.5	(353.55)	0.25	98.47
1.5	(353.55)	2.0	(250.00)	0.03	98.21
2.0	(250.00)	2.5	(176.78)	0	98.18
2.5	(176.78)	3.0	(125.00)	0.03	98.18
3.0	(125.00)	3.5	(88.39)	1.28	98.15
3.5	(88.39)	4.0	(62.50)	4.41	96.87
4.0	(62.50)	4.5	(44.19)	8.44	92.46
4.5	(44.19)	5.0	(31.25)	11.32	84.02
5.0	(31.25)	5.5	(22.10)	11.77	72.7
5.5	(22.10)	6.0	(15.63)	10.41	60.93
6.0	(15.63)	6.5	(11.05)	8.61	50.53
6.5	(11.05)	7.0	(7.81)	7.21	41.91
7.0	(7.81)	7.5	(5.52)	6.28	34.71
7.5	(5.52)	8.0	(3.90)	5.68	28.42

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.25	22.74
8.5	(2.76)	9.0	(1.95)	4.84	17.5
9.0	(1.95)	9.5	(1.38)	4.34	12.65
9.5	(1.38)	10.0	(0.98)	3.58	8.31
10.0	(0.98)	10.5	(0.69)	2.58	4.73
10.5	(0.69)	11.0	(0.49)	1.51	2.15
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 22-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:22:36 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.39

D[4,3] = 40.22um = 4.64phi
D[v,0.05] = 1.04um = 9.92phi
D[v,0.16] = 2.65um = 8.56phi

D[v,0.5] = 16.95um = 5.88phi
D[v,0.84] = 49.81um = 4.33phi
D[v,0.95] = 83.58um = 3.58phi

Kurtosis = 84.28
Skewness = 8.64
Standard Deviation = 130.57 um = 2.94phi

Inclusive SD (Sorting Coeff.) = 2.02 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

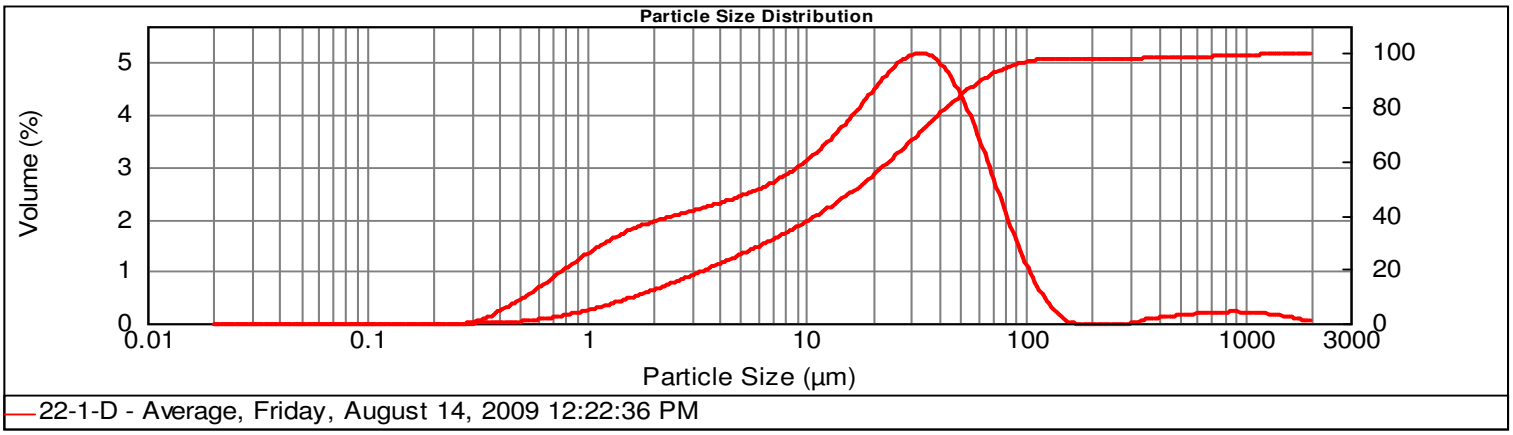
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.26 phi (Silt)

USGS
% Clay (0-2 um) = 12.27
% Fine Silt (2-3.9 um) = 9.24

d (0.1) : 1.663 **um**
d (0.5) : 16.954 **d (0.9) : 62.838**

Wentworth
% Clay (0-3.9 um) = 21.52
% Silt (3.91-31 um) = 47.06
% Coarse Silt (31 - 62.5 um) = 21.3
% Very Fine sand (62.5 - 125 um) = 8

% Fine sand (125-250 um) = .28
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = .9
% Very Coarse sand (1000 - 2000 um) = .65



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.22	100
-0.5	(1414.21)	0.0	(1000.00)	0.43	99.78
0.0	(1000.00)	0.5	(707.10)	0.49	99.35
0.5	(707.10)	1.0	(500.00)	0.41	98.87
1.0	(500.00)	1.5	(353.55)	0.27	98.46
1.5	(353.55)	2.0	(250.00)	0.03	98.19
2.0	(250.00)	2.5	(176.78)	0	98.16
2.5	(176.78)	3.0	(125.00)	0.28	98.16
3.0	(125.00)	3.5	(88.39)	2.22	97.88
3.5	(88.39)	4.0	(62.50)	5.79	95.66
4.0	(62.50)	4.5	(44.19)	9.51	89.88
4.5	(44.19)	5.0	(31.25)	11.52	80.37
5.0	(31.25)	5.5	(22.10)	11.26	68.85
5.5	(22.10)	6.0	(15.63)	9.72	57.59
6.0	(15.63)	6.5	(11.05)	8.09	47.87
6.5	(11.05)	7.0	(7.81)	6.85	39.78
7.0	(7.81)	7.5	(5.52)	5.99	32.93
7.5	(5.52)	8.0	(3.90)	5.41	26.95
8.0	(3.90)	8.5	(2.76)	4.98	21.54
8.5	(2.76)	9.0	(1.95)	4.59	16.56
9.0	(1.95)	9.5	(1.38)	4.1	11.97
9.5	(1.38)	10.0	(0.98)	3.38	7.87
10.0	(0.98)	10.5	(0.69)	2.44	4.49
10.5	(0.69)	11.0	(0.49)	1.43	2.05
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 22-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:27:46 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.63

D[4,3] = 33.52um = 4.9phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.62um = 8.58phi

D[v,0.5] = 15.88um = 5.98phi
D[v,0.84] = 46.49um = 4.43phi
D[v,0.95] = 77.27um = 3.69phi

Kurtosis = 105.62
Skewness = 9.4
Standard Deviation = 96.59 um = 3.37phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

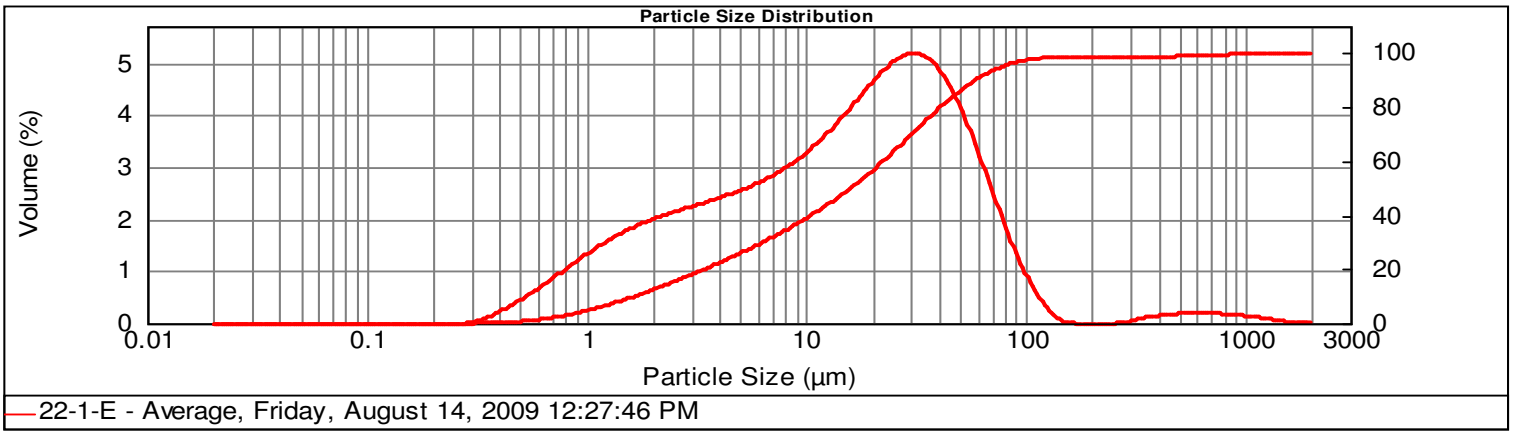
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.32
% Fine Silt (2-3.9 um) = 9.59

d (0.1) : 1.664 **um**
d (0.5) : 15.879 **d (0.9) : 58.545**

Wentworth
% Clay (0-3.9 um) = 21.91
% Silt (3.91-31 um) = 48.99
% Coarse Silt (31 - 62.5 um) = 20.51
% Very Fine sand (62.5 - 125 um) = 6.9

% Fine sand (125-250 um) = .15
% Medium sand (250-500 um) = .45
% Coarse sand (500-1000 um) = .82
% Very Coarse sand (1000 - 2000 um) = .27



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.05	100
-0.5	(1414.21)	0.0	(1000.00)	0.22	99.95
0.0	(1000.00)	0.5	(707.10)	0.38	99.73
0.5	(707.10)	1.0	(500.00)	0.44	99.34
1.0	(500.00)	1.5	(353.55)	0.35	98.91
1.5	(353.55)	2.0	(250.00)	0.1	98.56
2.0	(250.00)	2.5	(176.78)	0	98.46
2.5	(176.78)	3.0	(125.00)	0.15	98.46
3.0	(125.00)	3.5	(88.39)	1.79	98.31
3.5	(88.39)	4.0	(62.50)	5.11	96.52
4.0	(62.50)	4.5	(44.19)	8.91	91.41
4.5	(44.19)	5.0	(31.25)	11.32	82.49
5.0	(31.25)	5.5	(22.10)	11.48	71.17
5.5	(22.10)	6.0	(15.63)	10.13	59.69
6.0	(15.63)	6.5	(11.05)	8.49	49.57
6.5	(11.05)	7.0	(7.81)	7.19	41.08
7.0	(7.81)	7.5	(5.52)	6.29	33.88
7.5	(5.52)	8.0	(3.90)	5.66	27.6

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.19	21.93
8.5	(2.76)	9.0	(1.95)	4.73	16.75
9.0	(1.95)	9.5	(1.38)	4.17	12.01
9.5	(1.38)	10.0	(0.98)	3.4	7.84
10.0	(0.98)	10.5	(0.69)	2.42	4.44
10.5	(0.69)	11.0	(0.49)	1.42	2.02
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 22-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:32:33 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.35

D[4,3] = 37.56um = 4.73phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 16.6um = 5.91phi
D[v,0.84] = 49.33um = 4.34phi
D[v,0.95] = 81.65um = 3.61phi

Kurtosis = 101.41
Skewness = 9.47
Standard Deviation = 122.09 um = 3.03phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

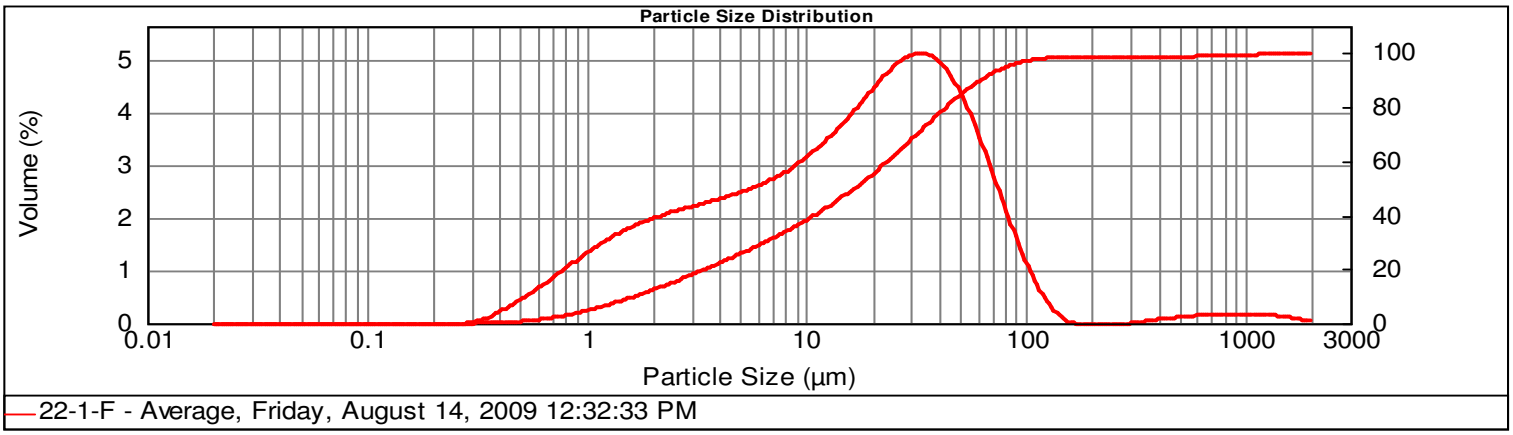
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.28 phi (Silt)

USGS
% Clay (0-2 um) = 12.32
% Fine Silt (2-3.9 um) = 9.48

d (0.1) : 1.663 **um**
d (0.5) : 16.598 **d (0.9) : 62.093**

Wentworth
% Clay (0-3.9 um) = 21.8
% Silt (3.91-31 um) = 47.21
% Coarse Silt (31 - 62.5 um) = 21.13
% Very Fine sand (62.5 - 125 um) = 8.1

% Fine sand (125-250 um) = .26
% Medium sand (250-500 um) = .21
% Coarse sand (500-1000 um) = .71
% Very Coarse sand (1000 - 2000 um) = .57



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.37	99.79
0.0	(1000.00)	0.5	(707.10)	0.39	99.43
0.5	(707.10)	1.0	(500.00)	0.32	99.04
1.0	(500.00)	1.5	(353.55)	0.19	98.72
1.5	(353.55)	2.0	(250.00)	0.02	98.53
2.0	(250.00)	2.5	(176.78)	0	98.51
2.5	(176.78)	3.0	(125.00)	0.26	98.51
3.0	(125.00)	3.5	(88.39)	2.26	98.24
3.5	(88.39)	4.0	(62.50)	5.84	95.99
4.0	(62.50)	4.5	(44.19)	9.47	90.15
4.5	(44.19)	5.0	(31.25)	11.4	80.68
5.0	(31.25)	5.5	(22.10)	11.16	69.28
5.5	(22.10)	6.0	(15.63)	9.69	58.12
6.0	(15.63)	6.5	(11.05)	8.12	48.43
6.5	(11.05)	7.0	(7.81)	6.9	40.31
7.0	(7.81)	7.5	(5.52)	6.07	33.41
7.5	(5.52)	8.0	(3.90)	5.52	27.35

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.11	21.83
8.5	(2.76)	9.0	(1.95)	4.7	16.72
9.0	(1.95)	9.5	(1.38)	4.17	12.01
9.5	(1.38)	10.0	(0.98)	3.41	7.84
10.0	(0.98)	10.5	(0.69)	2.43	4.43
10.5	(0.69)	11.0	(0.49)	1.41	2
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 23-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:45:43 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.22

D[4,3] = 51.75um = 4.27phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.84um = 8.46phi

D[v,0.5] = 16.61um = 5.91phi
D[v,0.84] = 51.74um = 4.27phi
D[v,0.95] = 114.85um = 3.12phi

Kurtosis = 47.57
Skewness = 6.45
Standard Deviation = 158.73 um = 2.66phi

Inclusive SD (Sorting Coeff.) = 2.07 phi (Very Poorly Sorted)
Inclusive Kurtosis = .96 phi (Mesokurtic)

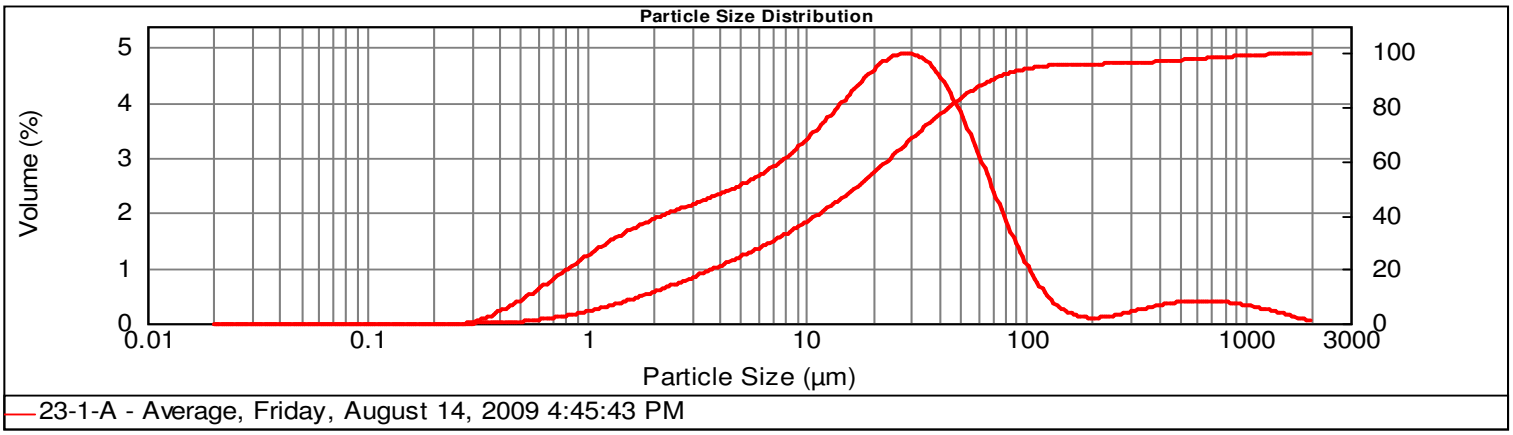
Inclusive Skewness = -0.19 (Coarse Skewed)
Inclusive Mean = 6.22 phi (Silt)

USGS
% Clay (0-2 um) = 11.44
% Fine Silt (2-3.9 um) = 9.17

d (0.1) : 1.774 **um**
d (0.5) : 16.614 **d (0.9) : 69.408**

Wentworth
% Clay (0-3.9 um) = 20.6
% Silt (3.91-31 um) = 48.53
% Coarse Silt (31 - 62.5 um) = 19
% Very Fine sand (62.5 - 125 um) = 7.2

% Fine sand (125-250 um) = .83
% Medium sand (250-500 um) = 1.22
% Coarse sand (500-1000 um) = 1.75
% Very Coarse sand (1000 - 2000 um) = .87



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.26	100
-0.5	(1414.21)	0.0	(1000.00)	0.6	99.74
0.0	(1000.00)	0.5	(707.10)	0.84	99.13
0.5	(707.10)	1.0	(500.00)	0.91	98.29
1.0	(500.00)	1.5	(353.55)	0.76	97.38
1.5	(353.55)	2.0	(250.00)	0.46	96.62
2.0	(250.00)	2.5	(176.78)	0.24	96.16
2.5	(176.78)	3.0	(125.00)	0.59	95.92
3.0	(125.00)	3.5	(88.39)	2.17	95.33
3.5	(88.39)	4.0	(62.50)	5.03	93.16
4.0	(62.50)	4.5	(44.19)	8.25	88.13
4.5	(44.19)	5.0	(31.25)	10.5	79.88
5.0	(31.25)	5.5	(22.10)	10.99	69.39
5.5	(22.10)	6.0	(15.63)	10.08	58.39
6.0	(15.63)	6.5	(11.05)	8.63	48.32
6.5	(11.05)	7.0	(7.81)	7.28	39.69
7.0	(7.81)	7.5	(5.52)	6.25	32.41
7.5	(5.52)	8.0	(3.90)	5.53	26.16
8.0	(3.90)	8.5	(2.76)	4.99	20.63
8.5	(2.76)	9.0	(1.95)	4.49	15.63
9.0	(1.95)	9.5	(1.38)	3.9	11.15
9.5	(1.38)	10.0	(0.98)	3.13	7.25
10.0	(0.98)	10.5	(0.69)	2.23	4.11
10.5	(0.69)	11.0	(0.49)	1.31	1.89
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 23-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:49:59 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.17

D[4,3] = 49.06um = 4.35phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.64um = 8.57phi

D[v,0.5] = 15um = 6.06phi
D[v,0.84] = 44.77um = 4.48phi
D[v,0.95] = 83.32um = 3.59phi

Kurtosis = 48.2
Skewness = 6.7
Standard Deviation = 174.14 um = 2.52phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

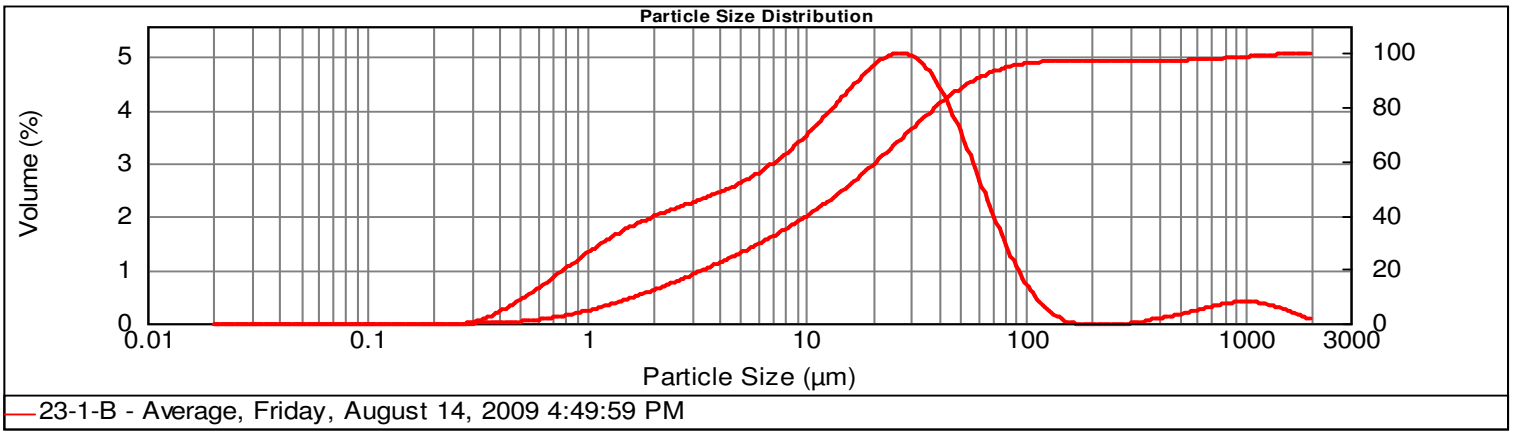
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.21
% Fine Silt (2-3.9 um) = 9.66

d (0.1) : 1.678 **um**
d (0.5) : 15.001 **d (0.9) : 58.084**

Wentworth
% Clay (0-3.9 um) = 21.87
% Silt (3.91-31 um) = 51.04
% Coarse Silt (31 - 62.5 um) = 18.42
% Very Fine sand (62.5 - 125 um) = 5.6

% Fine sand (125-250 um) = .18
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = 1.39
% Very Coarse sand (1000 - 2000 um) = 1.25



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.42	100
-0.5	(1414.21)	0.0	(1000.00)	0.83	99.58
0.0	(1000.00)	0.5	(707.10)	0.85	98.75
0.5	(707.10)	1.0	(500.00)	0.55	97.9
1.0	(500.00)	1.5	(353.55)	0.24	97.35
1.5	(353.55)	2.0	(250.00)	0.02	97.12
2.0	(250.00)	2.5	(176.78)	0	97.1
2.5	(176.78)	3.0	(125.00)	0.18	97.1
3.0	(125.00)	3.5	(88.39)	1.44	96.92
3.5	(88.39)	4.0	(62.50)	4.15	95.48
4.0	(62.50)	4.5	(44.19)	7.67	91.33
4.5	(44.19)	5.0	(31.25)	10.48	83.65
5.0	(31.25)	5.5	(22.10)	11.4	73.17
5.5	(22.10)	6.0	(15.63)	10.61	61.77
6.0	(15.63)	6.5	(11.05)	9.13	51.15
6.5	(11.05)	7.0	(7.81)	7.71	42.02
7.0	(7.81)	7.5	(5.52)	6.6	34.32
7.5	(5.52)	8.0	(3.90)	5.82	27.71

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.25	21.9
8.5	(2.76)	9.0	(1.95)	4.75	16.65
9.0	(1.95)	9.5	(1.38)	4.16	11.9
9.5	(1.38)	10.0	(0.98)	3.37	7.74
10.0	(0.98)	10.5	(0.69)	2.39	4.38
10.5	(0.69)	11.0	(0.49)	1.39	1.99
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 23-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:54:24 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.87

D[4,3] = 37.88um = 4.72phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.59um = 8.59phi

D[v,0.5] = 14.8um = 6.08phi
D[v,0.84] = 46.09um = 4.44phi
D[v,0.95] = 79.57um = 3.65phi

Kurtosis = 86.27
Skewness = 8.76
Standard Deviation = 128.34 um = 2.96phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

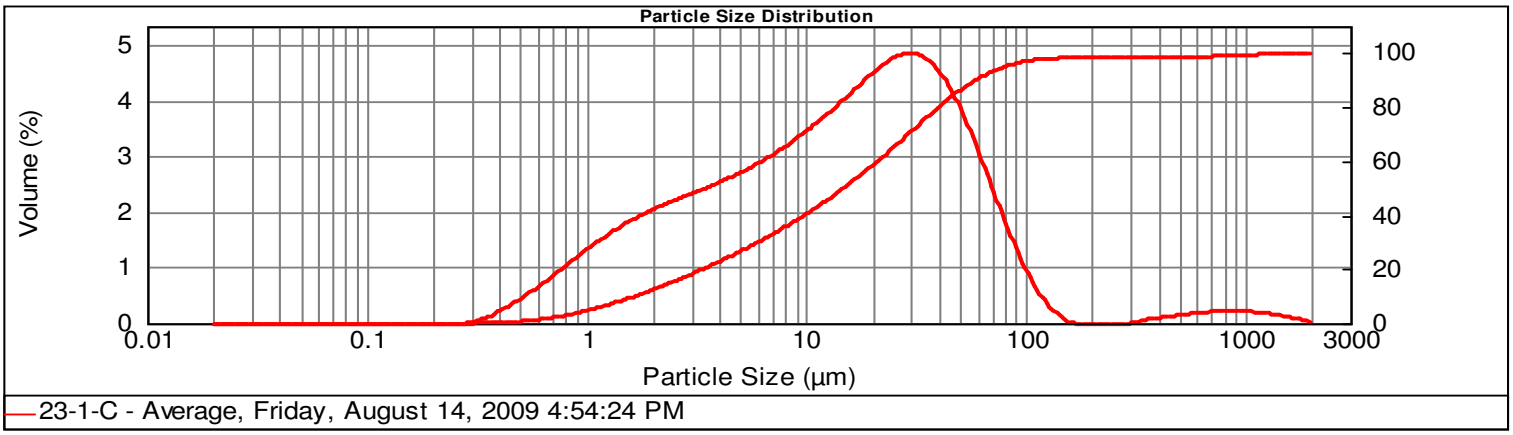
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.38
% Fine Silt (2-3.9 um) = 9.98

d (0.1) : 1.663 **um**
d (0.5) : 14.795 **d (0.9) : 58.939**

Wentworth
% Clay (0-3.9 um) = 22.36
% Silt (3.91-31 um) = 49.65
% Coarse Silt (31 - 62.5 um) = 19.17
% Very Fine sand (62.5 - 125 um) = 6.8

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = .89
% Very Coarse sand (1000 - 2000 um) = .62



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.2	100
-0.5	(1414.21)	0.0	(1000.00)	0.42	99.8
0.0	(1000.00)	0.5	(707.10)	0.49	99.38
0.5	(707.10)	1.0	(500.00)	0.4	98.89
1.0	(500.00)	1.5	(353.55)	0.24	98.48
1.5	(353.55)	2.0	(250.00)	0.03	98.25
2.0	(250.00)	2.5	(176.78)	0	98.22
2.5	(176.78)	3.0	(125.00)	0.23	98.22
3.0	(125.00)	3.5	(88.39)	1.86	97.99
3.5	(88.39)	4.0	(62.50)	4.94	96.13
4.0	(62.50)	4.5	(44.19)	8.36	91.19
4.5	(44.19)	5.0	(31.25)	10.56	82.83
5.0	(31.25)	5.5	(22.10)	10.88	72.27
5.5	(22.10)	6.0	(15.63)	9.94	61.39
6.0	(15.63)	6.5	(11.05)	8.71	51.45
6.5	(11.05)	7.0	(7.81)	7.62	42.74
7.0	(7.81)	7.5	(5.52)	6.73	35.12
7.5	(5.52)	8.0	(3.90)	6.01	28.4

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.43	22.39
8.5	(2.76)	9.0	(1.95)	4.89	16.95
9.0	(1.95)	9.5	(1.38)	4.25	12.06
9.5	(1.38)	10.0	(0.98)	3.41	7.82
10.0	(0.98)	10.5	(0.69)	2.41	4.41
10.5	(0.69)	11.0	(0.49)	1.4	2
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 23-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:58:49 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 25.05

D[4,3] = 43.33um = 4.53phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.42um = 8.69phi

D[v,0.5] = 14.54um = 6.1phi
D[v,0.84] = 45.43um = 4.46phi
D[v,0.95] = 79.29um = 3.66phi

Kurtosis = 62.58
Skewness = 7.55
Standard Deviation = 153.4 um = 2.7phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

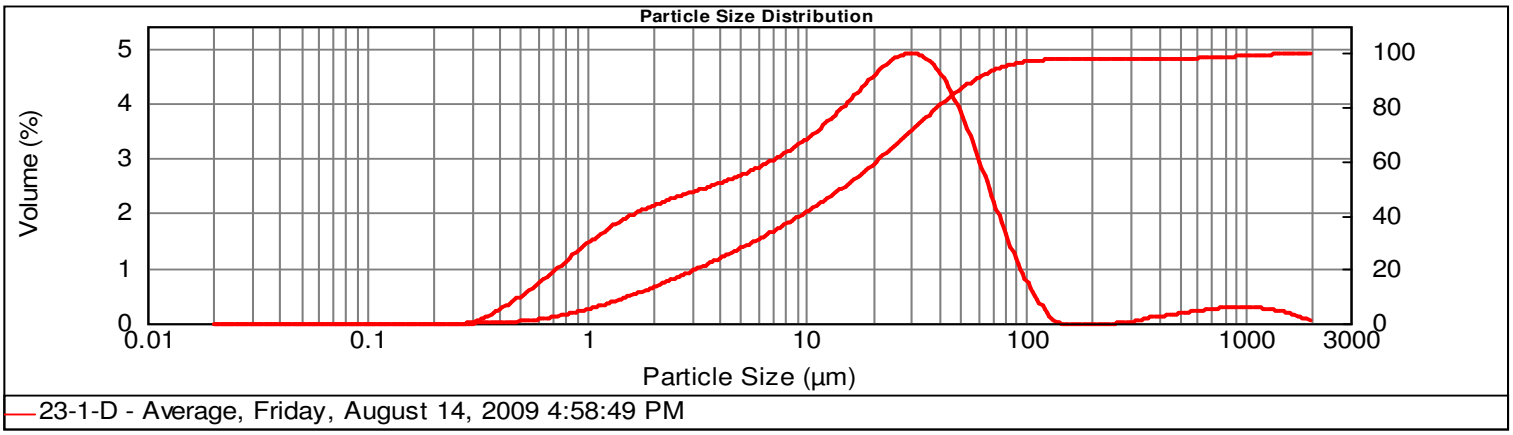
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 13.28
% Fine Silt (2-3.9 um) = 10.18

d (0.1) : 1.564 **um**
d (0.5) : 14.540 **d (0.9) : 58.066**

Wentworth
% Clay (0-3.9 um) = 23.46
% Silt (3.91-31 um) = 48.89
% Coarse Silt (31 - 62.5 um) = 19.11
% Very Fine sand (62.5 - 125 um) = 6.06

% Fine sand (125-250 um) = .05
% Medium sand (250-500 um) = .36
% Coarse sand (500-1000 um) = 1.14
% Very Coarse sand (1000 - 2000 um) = .93



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.32	100
-0.5	(1414.21)	0.0	(1000.00)	0.61	99.68
0.0	(1000.00)	0.5	(707.10)	0.65	99.07
0.5	(707.10)	1.0	(500.00)	0.49	98.42
1.0	(500.00)	1.5	(353.55)	0.3	97.93
1.5	(353.55)	2.0	(250.00)	0.06	97.63
2.0	(250.00)	2.5	(176.78)	0	97.57
2.5	(176.78)	3.0	(125.00)	0.05	97.57
3.0	(125.00)	3.5	(88.39)	1.48	97.52
3.5	(88.39)	4.0	(62.50)	4.58	96.04
4.0	(62.50)	4.5	(44.19)	8.23	91.46
4.5	(44.19)	5.0	(31.25)	10.62	83.23
5.0	(31.25)	5.5	(22.10)	10.92	72.6
5.5	(22.10)	6.0	(15.63)	9.82	61.68
6.0	(15.63)	6.5	(11.05)	8.46	51.86
6.5	(11.05)	7.0	(7.81)	7.38	43.4
7.0	(7.81)	7.5	(5.52)	6.57	36.02
7.5	(5.52)	8.0	(3.90)	5.96	29.45

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.49	23.49
8.5	(2.76)	9.0	(1.95)	5.05	17.99
9.0	(1.95)	9.5	(1.38)	4.48	12.95
9.5	(1.38)	10.0	(0.98)	3.66	8.47
10.0	(0.98)	10.5	(0.69)	2.62	4.81
10.5	(0.69)	11.0	(0.49)	1.53	2.2
11.0	(0.49)	11.5	(0.35)	0.61	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 23-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 5:03:18 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.13

D[4,3] = 32.93um = 4.92phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.82um = 8.47phi

D[v,0.5] = 15.75um = 5.99phi
D[v,0.84] = 46.85um = 4.42phi
D[v,0.95] = 78.12um = 3.68phi

Kurtosis = 129.28
Skewness = 10.56
Standard Deviation = 100.1 um = 3.32phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

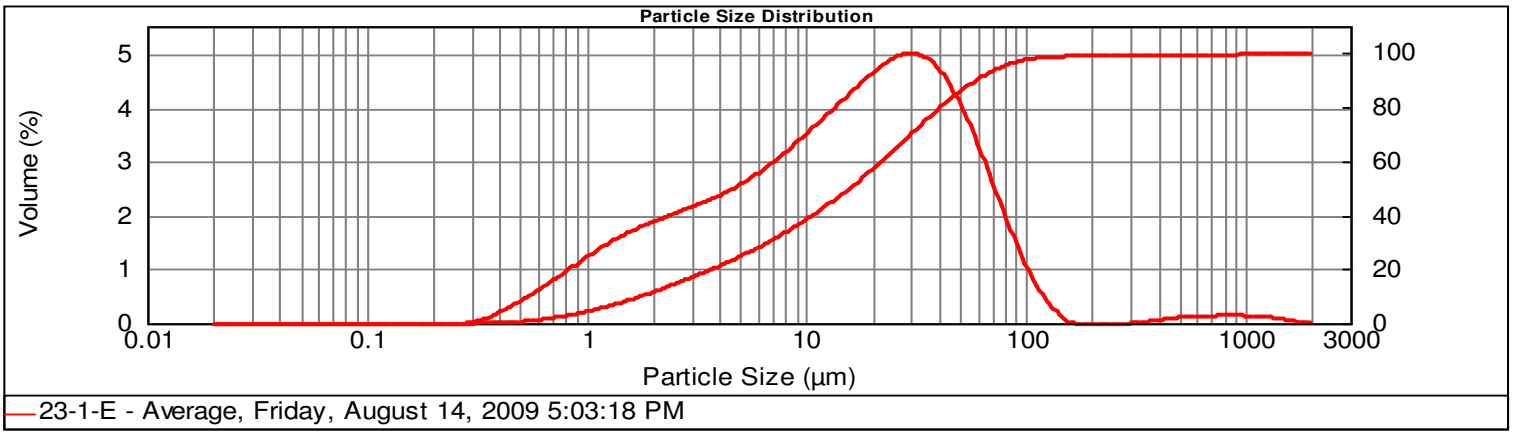
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.29 phi (Silt)

USGS
% Clay (0-2 um) = 11.49
% Fine Silt (2-3.9 um) = 9.23

d (0.1) : 1.768 **um**
d (0.5) : 15.751 **d (0.9) : 59.297**

Wentworth
% Clay (0-3.9 um) = 20.72
% Silt (3.91-31 um) = 50.35
% Coarse Silt (31 - 62.5 um) = 20.06
% Very Fine sand (62.5 - 125 um) = 7.46

% Fine sand (125-250 um) = .28
% Medium sand (250-500 um) = .16
% Coarse sand (500-1000 um) = .6
% Very Coarse sand (1000 - 2000 um) = .37



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.1	100
-0.5	(1414.21)	0.0	(1000.00)	0.27	99.9
0.0	(1000.00)	0.5	(707.10)	0.32	99.63
0.5	(707.10)	1.0	(500.00)	0.28	99.31
1.0	(500.00)	1.5	(353.55)	0.15	99.03
1.5	(353.55)	2.0	(250.00)	0.01	98.88
2.0	(250.00)	2.5	(176.78)	0	98.87
2.5	(176.78)	3.0	(125.00)	0.28	98.87
3.0	(125.00)	3.5	(88.39)	2.11	98.6
3.5	(88.39)	4.0	(62.50)	5.36	96.49
4.0	(62.50)	4.5	(44.19)	8.82	91.13
4.5	(44.19)	5.0	(31.25)	10.98	82.31
5.0	(31.25)	5.5	(22.10)	11.25	71.34
5.5	(22.10)	6.0	(15.63)	10.31	60.08
6.0	(15.63)	6.5	(11.05)	9.01	49.78
6.5	(11.05)	7.0	(7.81)	7.73	40.77
7.0	(7.81)	7.5	(5.52)	6.6	33.04
7.5	(5.52)	8.0	(3.90)	5.69	26.44

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.04	20.75
8.5	(2.76)	9.0	(1.95)	4.51	15.71
9.0	(1.95)	9.5	(1.38)	3.93	11.2
9.5	(1.38)	10.0	(0.98)	3.17	7.27
10.0	(0.98)	10.5	(0.69)	2.24	4.1
10.5	(0.69)	11.0	(0.49)	1.3	1.86
11.0	(0.49)	11.5	(0.35)	0.51	0.55
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 23-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 5:07:44 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.61

D[4,3] = 51.54um = 4.28phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.62um = 8.58phi

D[v,0.5] = 16.1um = 5.96phi
D[v,0.84] = 47.62um = 4.39phi
D[v,0.95] = 84.29um = 3.57phi

Kurtosis = 44.25
Skewness = 6.48
Standard Deviation = 180.61 um = 2.47phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

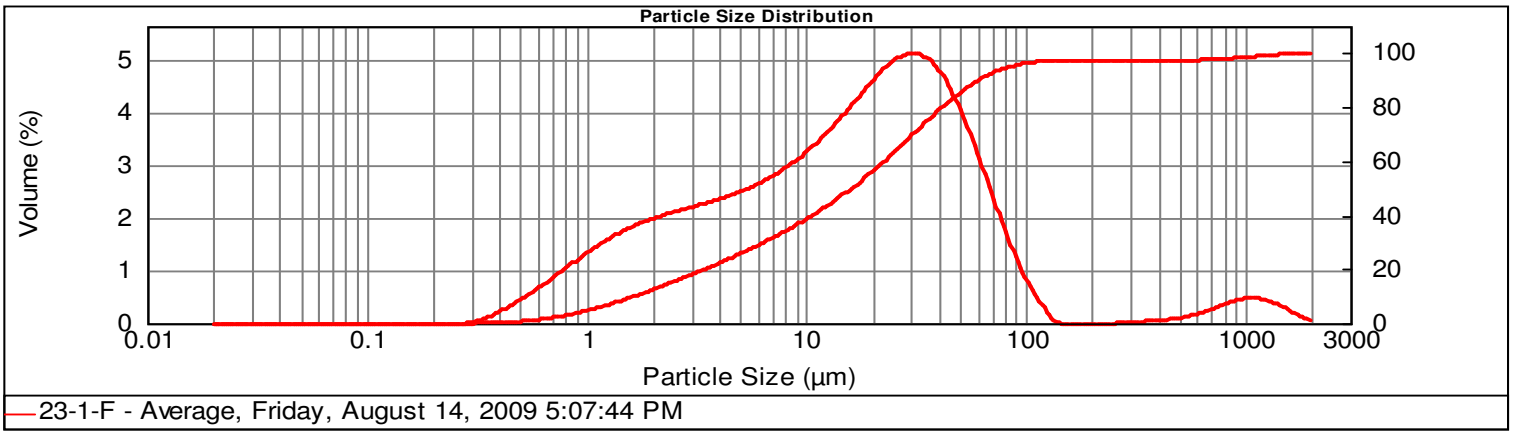
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.31 phi (Silt)

USGS
% Clay (0-2 um) = 12.35
% Fine Silt (2-3.9 um) = 9.47

d (0.1) : 1.659 **um**
d (0.5) : 16.104 **d (0.9) : 60.813**

Wentworth
% Clay (0-3.9 um) = 21.82
% Silt (3.91-31 um) = 48.58
% Coarse Silt (31 - 62.5 um) = 20.16
% Very Fine sand (62.5 - 125 um) = 6.5

% Fine sand (125-250 um) = .05
% Medium sand (250-500 um) = .18
% Coarse sand (500-1000 um) = 1.27
% Very Coarse sand (1000 - 2000 um) = 1.45



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.45	100
-0.5	(1414.21)	0.0	(1000.00)	1	99.55
0.0	(1000.00)	0.5	(707.10)	0.88	98.55
0.5	(707.10)	1.0	(500.00)	0.39	97.67
1.0	(500.00)	1.5	(353.55)	0.14	97.28
1.5	(353.55)	2.0	(250.00)	0.03	97.14
2.0	(250.00)	2.5	(176.78)	0	97.1
2.5	(176.78)	3.0	(125.00)	0.05	97.1
3.0	(125.00)	3.5	(88.39)	1.61	97.05
3.5	(88.39)	4.0	(62.50)	4.89	95.44
4.0	(62.50)	4.5	(44.19)	8.71	90.56
4.5	(44.19)	5.0	(31.25)	11.18	81.84
5.0	(31.25)	5.5	(22.10)	11.39	70.67
5.5	(22.10)	6.0	(15.63)	10.09	59.27
6.0	(15.63)	6.5	(11.05)	8.46	49.19
6.5	(11.05)	7.0	(7.81)	7.14	40.72
7.0	(7.81)	7.5	(5.52)	6.19	33.58
7.5	(5.52)	8.0	(3.90)	5.55	27.39
8.0	(3.90)	8.5	(2.76)	5.1	21.84
8.5	(2.76)	9.0	(1.95)	4.7	16.74
9.0	(1.95)	9.5	(1.38)	4.18	12.04
9.5	(1.38)	10.0	(0.98)	3.42	7.86
10.0	(0.98)	10.5	(0.69)	2.44	4.45
10.5	(0.69)	11.0	(0.49)	1.42	2.01
11.0	(0.49)	11.5	(0.35)	0.55	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 24-1A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:04:25 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.10

D[4,3] = 26.94um = 5.21phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 13.61um = 6.2phi
D[v,0.84] = 39.04um = 4.68phi
D[v,0.95] = 63.8um = 3.97phi

Kurtosis = 100.25
Skewness = 9.38
Standard Deviation = 73.59 um = 3.76phi

Inclusive SD (Sorting Coeff.) = 1.89 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

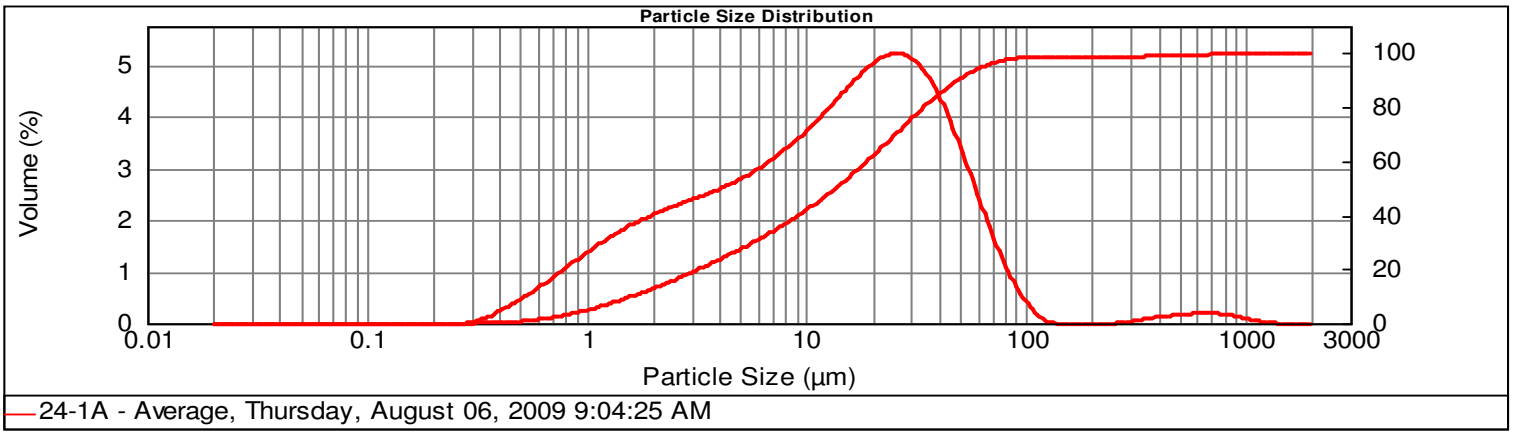
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 12.79
% Fine Silt (2-3.9 um) = 10.23

d (0.1) : 1.618 **um**
d (0.5) : 13.606 **d (0.9) : 48.910**

Wentworth
% Clay (0-3.9 um) = 23.02
% Silt (3.91-31 um) = 53.65
% Coarse Silt (31 - 62.5 um) = 18.03
% Very Fine sand (62.5 - 125 um) = 4.1

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .37
% Coarse sand (500-1000 um) = .76
% Very Coarse sand (1000 - 2000 um) = .07



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.07	100
0.0	(1000.00)	0.5	(707.10)	0.35	99.93
0.5	(707.10)	1.0	(500.00)	0.42	99.58
1.0	(500.00)	1.5	(353.55)	0.29	99.17
1.5	(353.55)	2.0	(250.00)	0.08	98.87
2.0	(250.00)	2.5	(176.78)	0	98.8
2.5	(176.78)	3.0	(125.00)	0	98.8
3.0	(125.00)	3.5	(88.39)	0.74	98.8
3.5	(88.39)	4.0	(62.50)	3.36	98.05
4.0	(62.50)	4.5	(44.19)	7.22	94.7
4.5	(44.19)	5.0	(31.25)	10.54	87.48
5.0	(31.25)	5.5	(22.10)	11.79	76.94
5.5	(22.10)	6.0	(15.63)	11.12	65.15
6.0	(15.63)	6.5	(11.05)	9.62	54.03
6.5	(11.05)	7.0	(7.81)	8.16	44.41
7.0	(7.81)	7.5	(5.52)	7.01	36.24
7.5	(5.52)	8.0	(3.90)	6.18	29.23
8.0	(3.90)	8.5	(2.76)	5.57	23.05
8.5	(2.76)	9.0	(1.95)	5.01	17.48
9.0	(1.95)	9.5	(1.38)	4.37	12.47
9.5	(1.38)	10.0	(0.98)	3.52	8.1
10.0	(0.98)	10.5	(0.69)	2.49	4.59
10.5	(0.69)	11.0	(0.49)	1.46	2.09
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 24-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:09:36 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.76

D[4,3] = 37.62um = 4.73phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.44um = 8.68phi

D[v,0.5] = 13.71um = 6.19phi
D[v,0.84] = 41.59um = 4.59phi
D[v,0.95] = 71.5um = 3.81phi

Kurtosis = 77.16
Skewness = 8.36
Standard Deviation = 136.33 um = 2.87phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

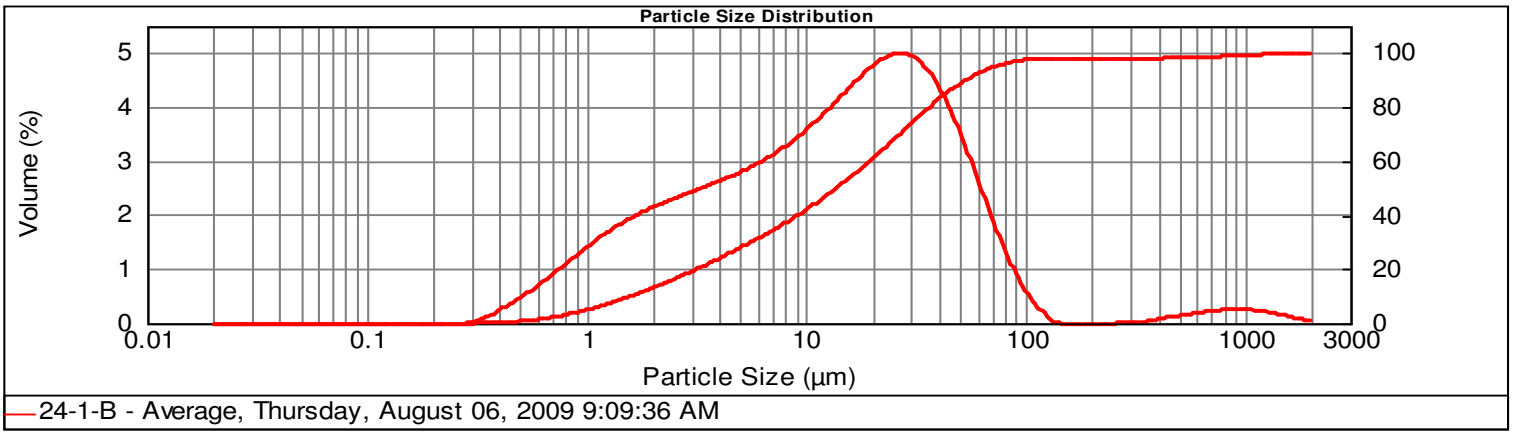
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.48 phi (Silt)

USGS
% Clay (0-2 um) = 13.11
% Fine Silt (2-3.9 um) = 10.38

d (0.1) : 1.585 um
d (0.5) : 13.712
d (0.9) : 52.985

Wentworth
% Clay (0-3.9 um) = 23.49
% Silt (3.91-31 um) = 51.58
% Coarse Silt (31 - 62.5 um) = 18.03
% Very Fine sand (62.5 - 125 um) = 4.93

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .24
% Coarse sand (500-1000 um) = .98
% Very Coarse sand (1000 - 2000 um) = .72



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.23	100
-0.5	(1414.21)	0.0	(1000.00)	0.5	99.77
0.0	(1000.00)	0.5	(707.10)	0.57	99.28
0.5	(707.10)	1.0	(500.00)	0.41	98.71
1.0	(500.00)	1.5	(353.55)	0.2	98.3
1.5	(353.55)	2.0	(250.00)	0.03	98.09
2.0	(250.00)	2.5	(176.78)	0	98.06
2.5	(176.78)	3.0	(125.00)	0.03	98.06
3.0	(125.00)	3.5	(88.39)	1.11	98.03
3.5	(88.39)	4.0	(62.50)	3.82	96.92
4.0	(62.50)	4.5	(44.19)	7.45	93.1
4.5	(44.19)	5.0	(31.25)	10.32	85.65
5.0	(31.25)	5.5	(22.10)	11.23	75.33
5.5	(22.10)	6.0	(15.63)	10.49	64.1
6.0	(15.63)	6.5	(11.05)	9.13	53.6
6.5	(11.05)	7.0	(7.81)	7.87	44.47
7.0	(7.81)	7.5	(5.52)	6.9	36.61
7.5	(5.52)	8.0	(3.90)	6.19	29.71

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.64	23.52
8.5	(2.76)	9.0	(1.95)	5.1	17.89
9.0	(1.95)	9.5	(1.38)	4.47	12.78
9.5	(1.38)	10.0	(0.98)	3.61	8.32
10.0	(0.98)	10.5	(0.69)	2.56	4.71
10.5	(0.69)	11.0	(0.49)	1.5	2.15
11.0	(0.49)	11.5	(0.35)	0.6	0.65
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 24-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:14:00 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.85

D[4,3] = 34.46um = 4.86phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.51um = 8.64phi

D[v,0.5] = 14.8um = 6.08phi
D[v,0.84] = 43.81um = 4.51phi
D[v,0.95] = 72.78um = 3.78phi

Kurtosis = 92.35
Skewness = 9.11
Standard Deviation = 114.84 um = 3.12phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

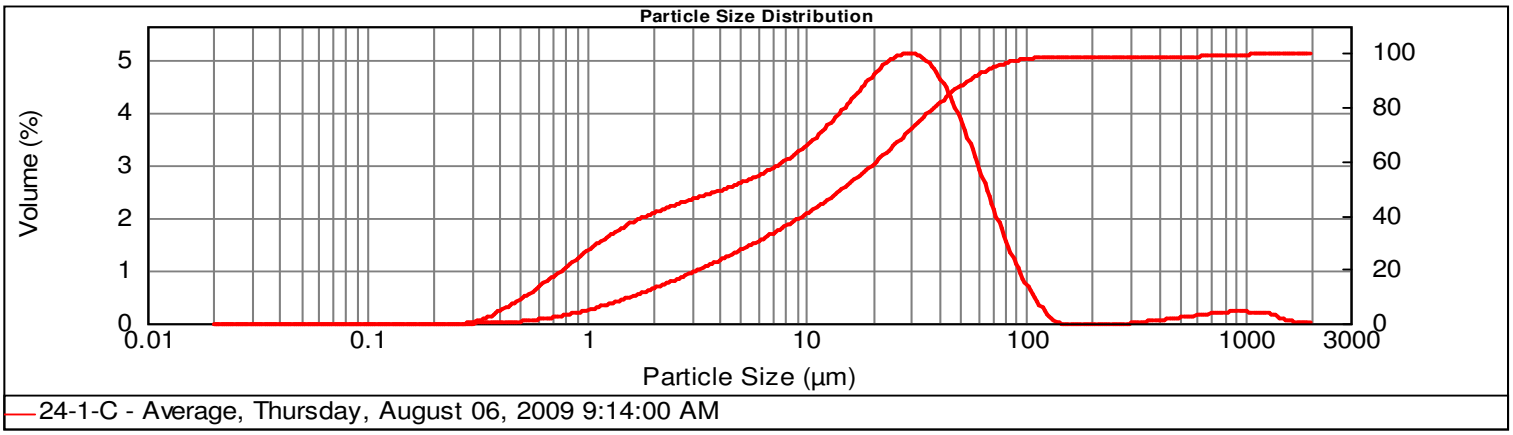
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.41 phi (Silt)

USGS
% Clay (0-2 um) = 12.75
% Fine Silt (2-3.9 um) = 10.07

d (0.1) : 1.622 **um**
d (0.5) : 14.803 **d (0.9) : 55.201**

Wentworth
% Clay (0-3.9 um) = 22.83
% Silt (3.91-31 um) = 50.16
% Coarse Silt (31 - 62.5 um) = 19.57
% Very Fine sand (62.5 - 125 um) = 5.92

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .16
% Coarse sand (500-1000 um) = .81
% Very Coarse sand (1000 - 2000 um) = .52



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.09	100
-0.5	(1414.21)	0.0	(1000.00)	0.43	99.91
0.0	(1000.00)	0.5	(707.10)	0.48	99.48
0.5	(707.10)	1.0	(500.00)	0.33	99
1.0	(500.00)	1.5	(353.55)	0.15	98.67
1.5	(353.55)	2.0	(250.00)	0.01	98.53
2.0	(250.00)	2.5	(176.78)	0	98.51
2.5	(176.78)	3.0	(125.00)	0.04	98.51
3.0	(125.00)	3.5	(88.39)	1.41	98.47
3.5	(88.39)	4.0	(62.50)	4.51	97.06
4.0	(62.50)	4.5	(44.19)	8.3	92.56
4.5	(44.19)	5.0	(31.25)	11	84.25
5.0	(31.25)	5.5	(22.10)	11.48	73.25
5.5	(22.10)	6.0	(15.63)	10.31	61.77
6.0	(15.63)	6.5	(11.05)	8.72	51.46
6.5	(11.05)	7.0	(7.81)	7.43	42.74
7.0	(7.81)	7.5	(5.52)	6.54	35.31
7.5	(5.52)	8.0	(3.90)	5.92	28.77

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.45	22.85
8.5	(2.76)	9.0	(1.95)	4.98	17.4
9.0	(1.95)	9.5	(1.38)	4.37	12.43
9.5	(1.38)	10.0	(0.98)	3.52	8.06
10.0	(0.98)	10.5	(0.69)	2.49	4.54
10.5	(0.69)	11.0	(0.49)	1.44	2.05
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 24-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:26:46 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.69

D[4,3] = 41.93um = 4.58phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 15.69um = 5.99phi
D[v,0.84] = 47.21um = 4.4phi
D[v,0.95] = 80.55um = 3.63phi

Kurtosis = 71.09
Skewness = 8.05
Standard Deviation = 145.99 um = 2.78phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

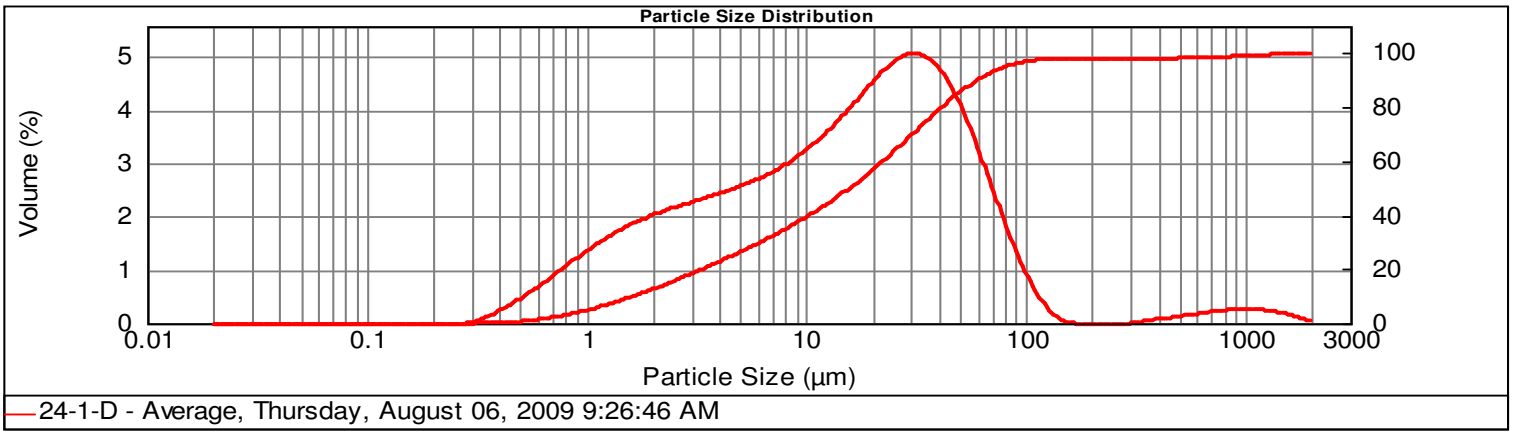
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 12.62
% Fine Silt (2-3.9 um) = 9.73

d (0.1) : 1.629 **um**
d (0.5) : 15.695 **d (0.9) : 59.911**

Wentworth
% Clay (0-3.9 um) = 22.35
% Silt (3.91-31 um) = 48.38
% Coarse Silt (31 - 62.5 um) = 20.16
% Very Fine sand (62.5 - 125 um) = 6.91

% Fine sand (125-250 um) = .16
% Medium sand (250-500 um) = .23
% Coarse sand (500-1000 um) = .96
% Very Coarse sand (1000 - 2000 um) = .86



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.3	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.7
0.0	(1000.00)	0.5	(707.10)	0.57	99.14
0.5	(707.10)	1.0	(500.00)	0.39	98.57
1.0	(500.00)	1.5	(353.55)	0.2	98.18
1.5	(353.55)	2.0	(250.00)	0.02	97.98
2.0	(250.00)	2.5	(176.78)	0	97.95
2.5	(176.78)	3.0	(125.00)	0.16	97.95
3.0	(125.00)	3.5	(88.39)	1.8	97.8
3.5	(88.39)	4.0	(62.50)	5.11	96
4.0	(62.50)	4.5	(44.19)	8.8	90.89
4.5	(44.19)	5.0	(31.25)	11.09	82.09
5.0	(31.25)	5.5	(22.10)	11.2	71
5.5	(22.10)	6.0	(15.63)	9.91	59.79
6.0	(15.63)	6.5	(11.05)	8.36	49.88
6.5	(11.05)	7.0	(7.81)	7.14	41.52
7.0	(7.81)	7.5	(5.52)	6.3	34.38
7.5	(5.52)	8.0	(3.90)	5.71	28.09

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.26	22.38
8.5	(2.76)	9.0	(1.95)	4.81	17.12
9.0	(1.95)	9.5	(1.38)	4.25	12.31
9.5	(1.38)	10.0	(0.98)	3.47	8.05
10.0	(0.98)	10.5	(0.69)	2.48	4.59
10.5	(0.69)	11.0	(0.49)	1.46	2.1
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 24-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:31:23 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.87

D[4,3] = 21.48um = 5.54phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.54um = 8.62phi

D[v,0.5] = 14.61um = 6.1phi
D[v,0.84] = 41.92um = 4.58phi
D[v,0.95] = 65.45um = 3.93phi

Kurtosis = 2.09
Skewness = 1.45
Standard Deviation = 21.46 um = 5.54phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .86 phi (Platykurtic)

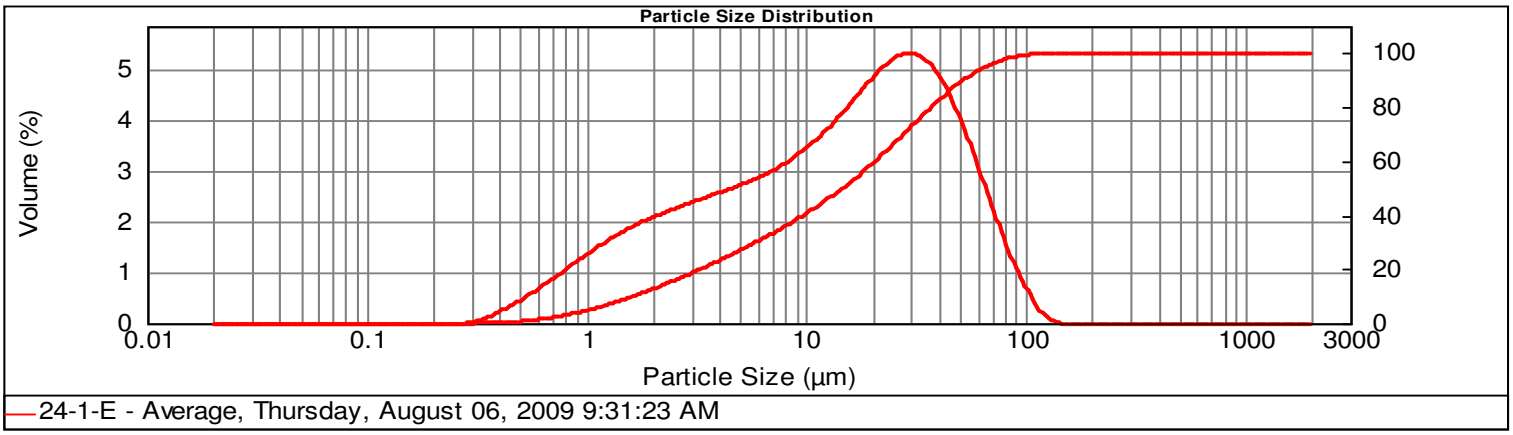
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.43 phi (Silt)

USGS
% Clay (0-2 um) = 12.6
% Fine Silt (2-3.9 um) = 10.12

d (0.1) : 1.638 **um**
d (0.5) : 14.606 **d (0.9) : 51.810**

Wentworth
% Clay (0-3.9 um) = 22.73
% Silt (3.91-31 um) = 51.22
% Coarse Silt (31 - 62.5 um) = 20.21
% Very Fine sand (62.5 - 125 um) = 5.8

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.04	100
3.0	(125.00)	3.5	(88.39)	1.28	99.96
3.5	(88.39)	4.0	(62.50)	4.52	98.69
4.0	(62.50)	4.5	(44.19)	8.56	94.16
4.5	(44.19)	5.0	(31.25)	11.38	85.6
5.0	(31.25)	5.5	(22.10)	11.82	74.23
5.5	(22.10)	6.0	(15.63)	10.55	62.41
6.0	(15.63)	6.5	(11.05)	8.88	51.85
6.5	(11.05)	7.0	(7.81)	7.55	42.98
7.0	(7.81)	7.5	(5.52)	6.65	35.43
7.5	(5.52)	8.0	(3.90)	6.02	28.78
8.0	(3.90)	8.5	(2.76)	5.5	22.76
8.5	(2.76)	9.0	(1.95)	4.97	17.25
9.0	(1.95)	9.5	(1.38)	4.32	12.28
9.5	(1.38)	10.0	(0.98)	3.47	7.96
10.0	(0.98)	10.5	(0.69)	2.45	4.5
10.5	(0.69)	11.0	(0.49)	1.43	2.04
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 24-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:35:51 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 10.21

D[4,3] = 26.72um = 5.23phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.48um = 8.65phi

D[v,0.5] = 13.54um = 6.21phi
D[v,0.84] = 40.19um = 4.64phi
D[v,0.95] = 65.89um = 3.92phi

Kurtosis = 120.57
Skewness = 10.32
Standard Deviation = 74.33 um = 3.75phi

Inclusive SD (Sorting Coeff.) = 1.91 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

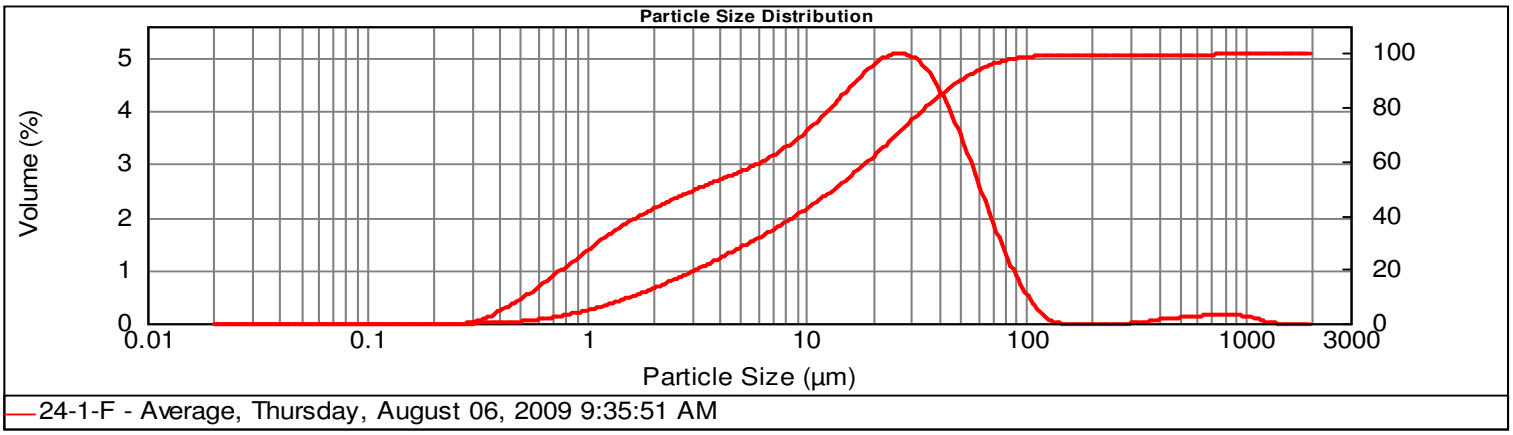
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 12.82
% Fine Silt (2-3.9 um) = 10.58

d (0.1) : 1.621 **um**
d (0.5) : 13.541 **d (0.9) : 50.542**

Wentworth
% Clay (0-3.9 um) = 23.4
% Silt (3.91-31 um) = 52.51
% Coarse Silt (31 - 62.5 um) = 18.27
% Very Fine sand (62.5 - 125 um) = 4.86

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .18
% Coarse sand (500-1000 um) = .64
% Very Coarse sand (1000 - 2000 um) = .13



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.13	100
0.0	(1000.00)	0.5	(707.10)	0.34	99.87
0.5	(707.10)	1.0	(500.00)	0.3	99.53
1.0	(500.00)	1.5	(353.55)	0.17	99.23
1.5	(353.55)	2.0	(250.00)	0.01	99.07
2.0	(250.00)	2.5	(176.78)	0	99.06
2.5	(176.78)	3.0	(125.00)	0.02	99.06
3.0	(125.00)	3.5	(88.39)	1.03	99.04
3.5	(88.39)	4.0	(62.50)	3.83	98.01
4.0	(62.50)	4.5	(44.19)	7.53	94.18
4.5	(44.19)	5.0	(31.25)	10.48	86.65
5.0	(31.25)	5.5	(22.10)	11.46	76.17
5.5	(22.10)	6.0	(15.63)	10.71	64.71
6.0	(15.63)	6.5	(11.05)	9.27	54.01
6.5	(11.05)	7.0	(7.81)	7.95	44.74
7.0	(7.81)	7.5	(5.52)	7.01	36.79
7.5	(5.52)	8.0	(3.90)	6.34	29.78
8.0	(3.90)	8.5	(2.76)	5.78	23.43
8.5	(2.76)	9.0	(1.95)	5.17	17.66
9.0	(1.95)	9.5	(1.38)	4.44	12.49
9.5	(1.38)	10.0	(0.98)	3.53	8.05
10.0	(0.98)	10.5	(0.69)	2.48	4.52
10.5	(0.69)	11.0	(0.49)	1.44	2.05
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 11:34:35 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.05

D[4,3] = 37.38um = 4.74phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.56um = 8.61phi

D[v,0.5] = 14.78um = 6.08phi
D[v,0.84] = 42.5um = 4.56phi
D[v,0.95] = 72.22um = 3.79phi

Kurtosis = 81.05
Skewness = 8.5
Standard Deviation = 129.81 um = 2.95phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

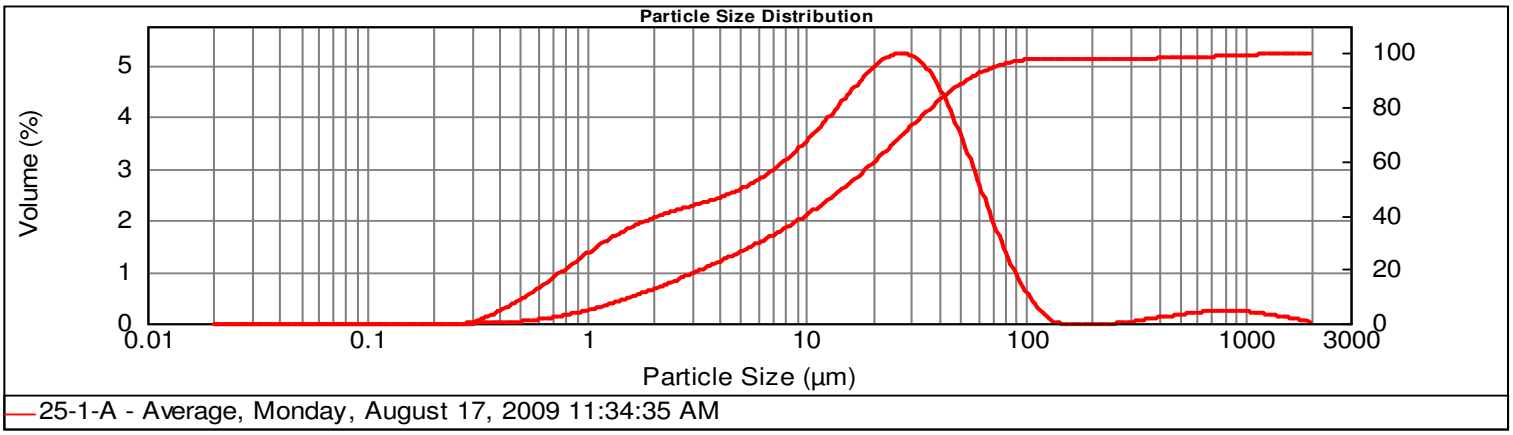
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 12.58
% Fine Silt (2-3.9 um) = 9.76

d (0.1) : 1.636 **um**
d (0.5) : 14.777 **d (0.9) : 53.813**

Wentworth
% Clay (0-3.9 um) = 22.34
% Silt (3.91-31 um) = 51.65
% Coarse Silt (31 - 62.5 um) = 18.91
% Very Fine sand (62.5 - 125 um) = 5.11

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .34
% Coarse sand (500-1000 um) = 1.01
% Very Coarse sand (1000 - 2000 um) = .62



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.19	100
-0.5	(1414.21)	0.0	(1000.00)	0.43	99.81
0.0	(1000.00)	0.5	(707.10)	0.55	99.38
0.5	(707.10)	1.0	(500.00)	0.46	98.83
1.0	(500.00)	1.5	(353.55)	0.28	98.37
1.5	(353.55)	2.0	(250.00)	0.06	98.09
2.0	(250.00)	2.5	(176.78)	0	98.04
2.5	(176.78)	3.0	(125.00)	0.03	98.04
3.0	(125.00)	3.5	(88.39)	1.13	98.01
3.5	(88.39)	4.0	(62.50)	3.98	96.88
4.0	(62.50)	4.5	(44.19)	7.8	92.9
4.5	(44.19)	5.0	(31.25)	10.84	85.1
5.0	(31.25)	5.5	(22.10)	11.79	74.26
5.5	(22.10)	6.0	(15.63)	10.87	62.47
6.0	(15.63)	6.5	(11.05)	9.23	51.6
6.5	(11.05)	7.0	(7.81)	7.71	42.37
7.0	(7.81)	7.5	(5.52)	6.54	34.66
7.5	(5.52)	8.0	(3.90)	5.75	28.12
8.0	(3.90)	8.5	(2.76)	5.26	22.36
8.5	(2.76)	9.0	(1.95)	4.84	17.1
9.0	(1.95)	9.5	(1.38)	4.27	12.27
9.5	(1.38)	10.0	(0.98)	3.45	8
10.0	(0.98)	10.5	(0.69)	2.46	4.54
10.5	(0.69)	11.0	(0.49)	1.44	2.09
11.0	(0.49)	11.5	(0.35)	0.59	0.65
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 11:38:53 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.83

D[4,3] = 30.51um = 5.03phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.46um = 8.67phi

D[v,0.5] = 14.87um = 6.07phi
D[v,0.84] = 43.01um = 4.54phi
D[v,0.95] = 69.99um = 3.84phi

Kurtosis = 97.61
Skewness = 9.28
Standard Deviation = 87.69 um = 3.51phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

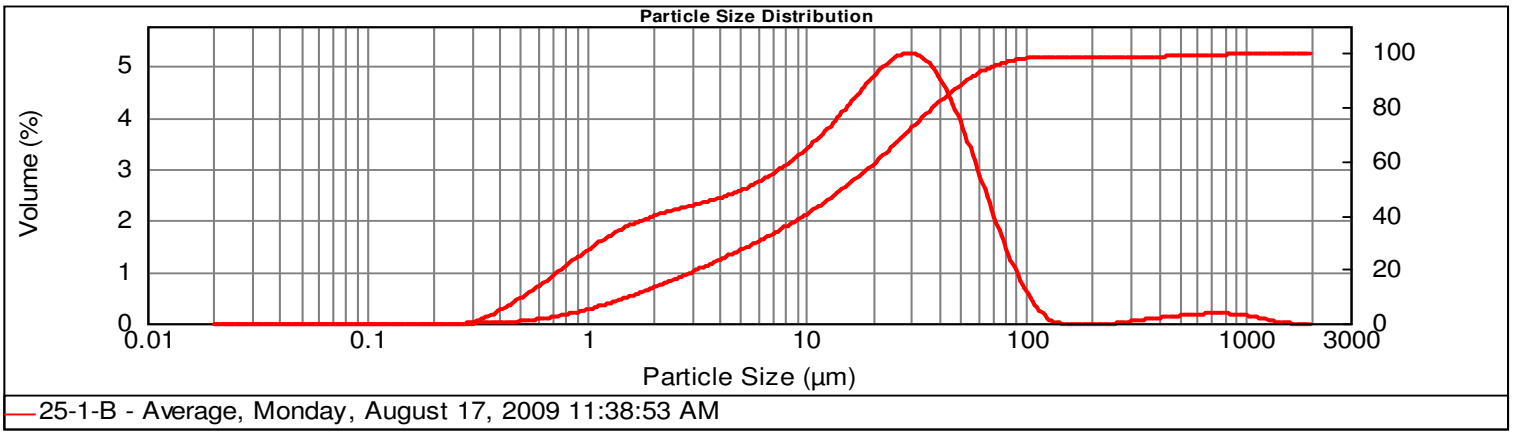
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.43 phi (Silt)

USGS
% Clay (0-2 um) = 13.09
% Fine Silt (2-3.9 um) = 9.84

d (0.1) : 1.579 **um**
d (0.5) : 14.872 **d (0.9) : 53.757**

Wentworth
% Clay (0-3.9 um) = 22.93
% Silt (3.91-31 um) = 50.37
% Coarse Silt (31 - 62.5 um) = 19.85
% Very Fine sand (62.5 - 125 um) = 5.48

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .34
% Coarse sand (500-1000 um) = .8
% Very Coarse sand (1000 - 2000 um) = .21



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.2	100
0.0	(1000.00)	0.5	(707.10)	0.41	99.79
0.5	(707.10)	1.0	(500.00)	0.39	99.38
1.0	(500.00)	1.5	(353.55)	0.25	98.99
1.5	(353.55)	2.0	(250.00)	0.08	98.74
2.0	(250.00)	2.5	(176.78)	0	98.66
2.5	(176.78)	3.0	(125.00)	0.02	98.66
3.0	(125.00)	3.5	(88.39)	1.17	98.63
3.5	(88.39)	4.0	(62.50)	4.31	97.47
4.0	(62.50)	4.5	(44.19)	8.35	93.15
4.5	(44.19)	5.0	(31.25)	11.23	84.81
5.0	(31.25)	5.5	(22.10)	11.74	73.57
5.5	(22.10)	6.0	(15.63)	10.48	61.84
6.0	(15.63)	6.5	(11.05)	8.8	51.35
6.5	(11.05)	7.0	(7.81)	7.44	42.55
7.0	(7.81)	7.5	(5.52)	6.43	35.11
7.5	(5.52)	8.0	(3.90)	5.73	28.68
8.0	(3.90)	8.5	(2.76)	5.28	22.96
8.5	(2.76)	9.0	(1.95)	4.9	17.68
9.0	(1.95)	9.5	(1.38)	4.39	12.77
9.5	(1.38)	10.0	(0.98)	3.6	8.38
10.0	(0.98)	10.5	(0.69)	2.58	4.78
10.5	(0.69)	11.0	(0.49)	1.52	2.2
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 11:43:39 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.58

D[4,3] = 40.93um = 4.61phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.45um = 8.67phi

D[v,0.5] = 15.32um = 6.03phi
D[v,0.84] = 44.95um = 4.48phi
D[v,0.95] = 74.56um = 3.75phi

Kurtosis = 73.39
Skewness = 8.22
Standard Deviation = 149.17 um = 2.74phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

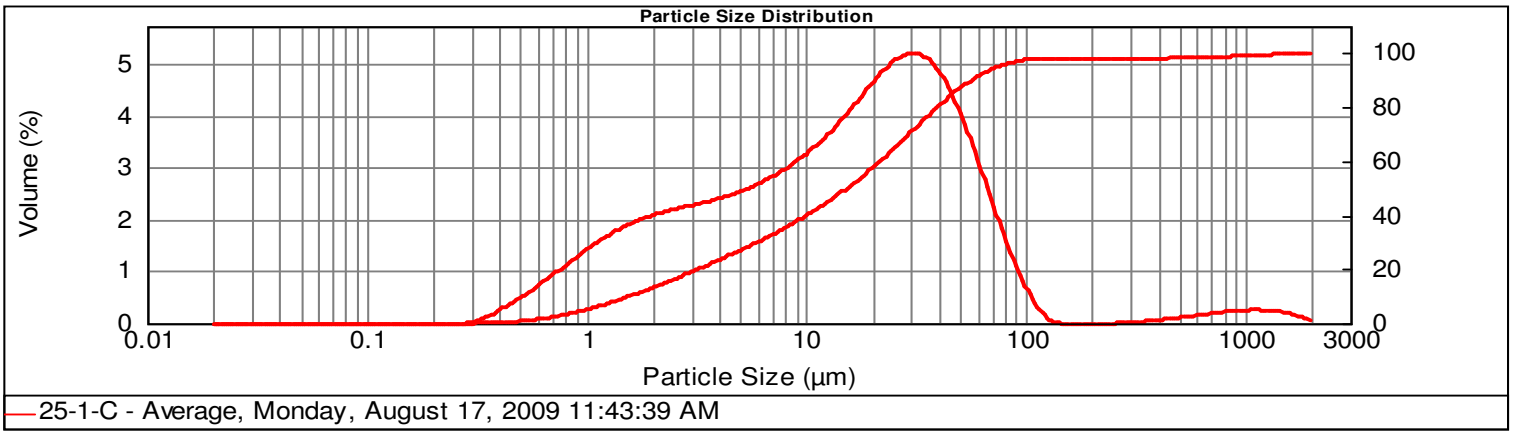
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 13.17
% Fine Silt (2-3.9 um) = 9.78

d (0.1) : 1.569 **um**
d (0.5) : 15.322 **d (0.9) : 56.454**

Wentworth
% Clay (0-3.9 um) = 22.95
% Silt (3.91-31 um) = 48.96
% Coarse Silt (31 - 62.5 um) = 20.23
% Very Fine sand (62.5 - 125 um) = 5.89

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .19
% Coarse sand (500-1000 um) = .84
% Very Coarse sand (1000 - 2000 um) = .92



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.36	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.64
0.0	(1000.00)	0.5	(707.10)	0.51	99.08
0.5	(707.10)	1.0	(500.00)	0.34	98.57
1.0	(500.00)	1.5	(353.55)	0.16	98.24
1.5	(353.55)	2.0	(250.00)	0.02	98.07
2.0	(250.00)	2.5	(176.78)	0	98.05
2.5	(176.78)	3.0	(125.00)	0.02	98.05
3.0	(125.00)	3.5	(88.39)	1.27	98.03
3.5	(88.39)	4.0	(62.50)	4.62	96.76
4.0	(62.50)	4.5	(44.19)	8.65	92.14
4.5	(44.19)	5.0	(31.25)	11.31	83.49
5.0	(31.25)	5.5	(22.10)	11.54	72.18
5.5	(22.10)	6.0	(15.63)	10.13	60.65
6.0	(15.63)	6.5	(11.05)	8.45	50.52
6.5	(11.05)	7.0	(7.81)	7.17	42.07
7.0	(7.81)	7.5	(5.52)	6.27	34.9
7.5	(5.52)	8.0	(3.90)	5.64	28.62
8.0	(3.90)	8.5	(2.76)	5.24	22.98
8.5	(2.76)	9.0	(1.95)	4.89	17.74
9.0	(1.95)	9.5	(1.38)	4.4	12.85
9.5	(1.38)	10.0	(0.98)	3.63	8.45
10.0	(0.98)	10.5	(0.69)	2.61	4.83
10.5	(0.69)	11.0	(0.49)	1.54	2.22
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 11:50:42 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.36

D[4,3] = 36.12um = 4.79phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.78um = 8.49phi

D[v,0.5] = 16.65um = 5.91phi
D[v,0.84] = 47.06um = 4.41phi
D[v,0.95] = 76.65um = 3.71phi

Kurtosis = 99.31
Skewness = 9.37
Standard Deviation = 115.32 um = 3.12phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

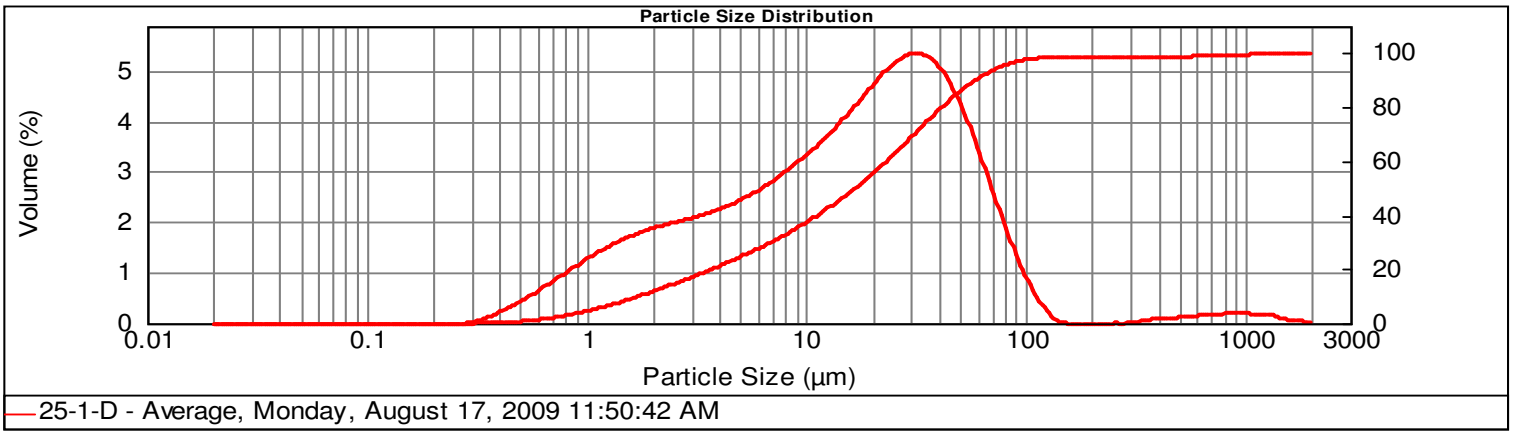
Inclusive Skewness = -0.28 (Coarse Skewed)
Inclusive Mean = 6.27 phi (Silt)

USGS
% Clay (0-2 um) = 11.77
% Fine Silt (2-3.9 um) = 8.96

d (0.1) : 1.725 **um**
d (0.5) : 16.652 **d (0.9) : 58.778**

Wentworth
% Clay (0-3.9 um) = 20.73
% Silt (3.91-31 um) = 49.3
% Coarse Silt (31 - 62.5 um) = 21.35
% Very Fine sand (62.5 - 125 um) = 7.03

% Fine sand (125-250 um) = .09
% Medium sand (250-500 um) = .24
% Coarse sand (500-1000 um) = .75
% Very Coarse sand (1000 - 2000 um) = .51



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.13	100
-0.5	(1414.21)	0.0	(1000.00)	0.38	99.87
0.0	(1000.00)	0.5	(707.10)	0.42	99.49
0.5	(707.10)	1.0	(500.00)	0.33	99.06
1.0	(500.00)	1.5	(353.55)	0.2	98.74
1.5	(353.55)	2.0	(250.00)	0.04	98.54
2.0	(250.00)	2.5	(176.78)	0	98.5
2.5	(176.78)	3.0	(125.00)	0.09	98.5
3.0	(125.00)	3.5	(88.39)	1.74	98.41
3.5	(88.39)	4.0	(62.50)	5.29	96.67
4.0	(62.50)	4.5	(44.19)	9.32	91.38
4.5	(44.19)	5.0	(31.25)	11.75	82.06
5.0	(31.25)	5.5	(22.10)	11.77	70.31
5.5	(22.10)	6.0	(15.63)	10.3	58.54
6.0	(15.63)	6.5	(11.05)	8.64	48.24
6.5	(11.05)	7.0	(7.81)	7.28	39.6
7.0	(7.81)	7.5	(5.52)	6.2	32.32
7.5	(5.52)	8.0	(3.90)	5.37	26.13

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.83	20.75
8.5	(2.76)	9.0	(1.95)	4.44	15.92
9.0	(1.95)	9.5	(1.38)	3.96	11.48
9.5	(1.38)	10.0	(0.98)	3.24	7.52
10.0	(0.98)	10.5	(0.69)	2.32	4.28
10.5	(0.69)	11.0	(0.49)	1.36	1.96
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 11:55:37 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.31

D[4,3] = 43.22um = 4.53phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 17.53um = 5.83phi
D[v,0.84] = 51.21um = 4.29phi
D[v,0.95] = 85.18um = 3.55phi

Kurtosis = 74.12
Skewness = 8.23
Standard Deviation = 146.03 um = 2.78phi

Inclusive SD (Sorting Coeff.) = 2.04 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

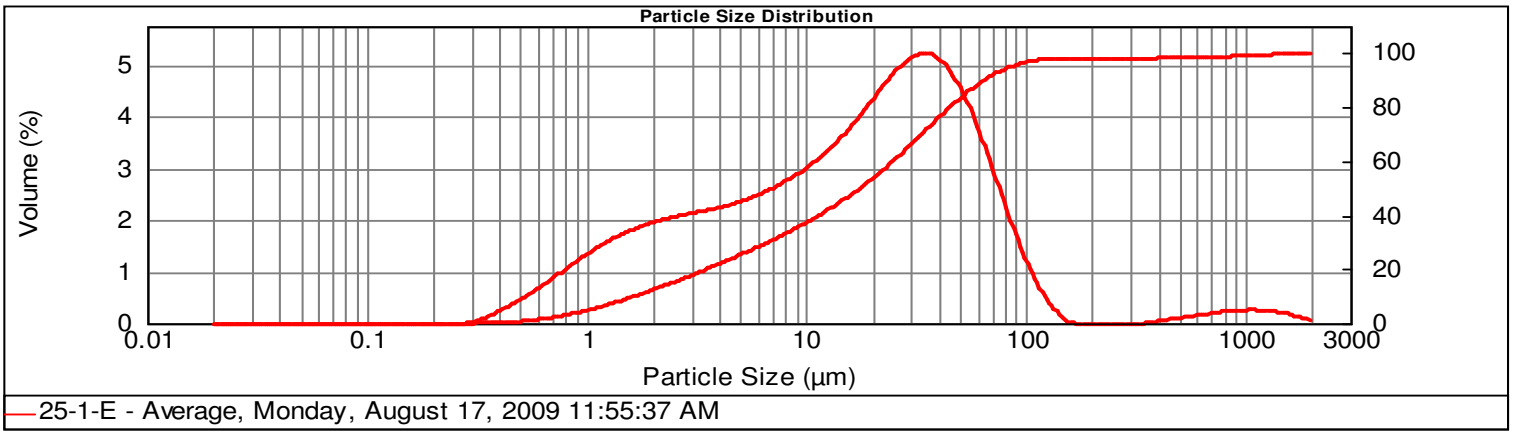
Inclusive Skewness = -0.28 (Coarse Skewed)
Inclusive Mean = 6.23 phi (Silt)

USGS
% Clay (0-2 um) = 12.38
% Fine Silt (2-3.9 um) = 9.17

d (0.1) : 1.652 **um**
d (0.5) : 17.532 **d (0.9) : 64.360**

Wentworth
% Clay (0-3.9 um) = 21.55
% Silt (3.91-31 um) = 45.87
% Coarse Silt (31 - 62.5 um) = 21.9
% Very Fine sand (62.5 - 125 um) = 8.53

% Fine sand (125-250 um) = .3
% Medium sand (250-500 um) = .12
% Coarse sand (500-1000 um) = .85
% Very Coarse sand (1000 - 2000 um) = .88



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.32	100
-0.5	(1414.21)	0.0	(1000.00)	0.55	99.68
0.0	(1000.00)	0.5	(707.10)	0.52	99.12
0.5	(707.10)	1.0	(500.00)	0.33	98.6
1.0	(500.00)	1.5	(353.55)	0.12	98.27
1.5	(353.55)	2.0	(250.00)	0	98.15
2.0	(250.00)	2.5	(176.78)	0	98.15
2.5	(176.78)	3.0	(125.00)	0.3	98.15
3.0	(125.00)	3.5	(88.39)	2.4	97.85
3.5	(88.39)	4.0	(62.50)	6.14	95.46
4.0	(62.50)	4.5	(44.19)	9.89	89.32
4.5	(44.19)	5.0	(31.25)	11.73	79.43
5.0	(31.25)	5.5	(22.10)	11.18	67.7
5.5	(22.10)	6.0	(15.63)	9.45	56.51
6.0	(15.63)	6.5	(11.05)	7.79	47.07
6.5	(11.05)	7.0	(7.81)	6.63	39.27
7.0	(7.81)	7.5	(5.52)	5.82	32.65
7.5	(5.52)	8.0	(3.90)	5.26	26.83
8.0	(3.90)	8.5	(2.76)	4.9	21.57
8.5	(2.76)	9.0	(1.95)	4.6	16.67
9.0	(1.95)	9.5	(1.38)	4.14	12.07
9.5	(1.38)	10.0	(0.98)	3.41	7.94
10.0	(0.98)	10.5	(0.69)	2.45	4.53
10.5	(0.69)	11.0	(0.49)	1.44	2.08
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 12:00:18 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.78

D[4,3] = 43.3um = 4.53phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.64um = 8.56phi

D[v,0.5] = 17.18um = 5.86phi
D[v,0.84] = 48.69um = 4.36phi
D[v,0.95] = 79.67um = 3.65phi

Kurtosis = 71.47
Skewness = 8.12
Standard Deviation = 152.04 um = 2.72phi

Inclusive SD (Sorting Coeff.) = 2 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

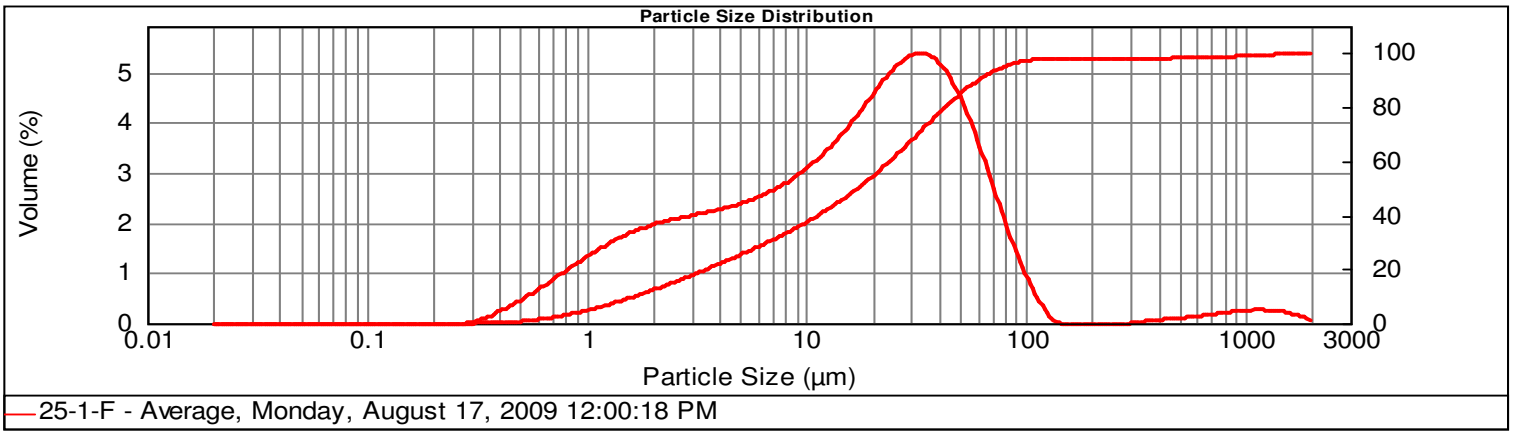
Inclusive Skewness = -0.29 (Coarse Skewed)
Inclusive Mean = 6.26 phi (Silt)

USGS
% Clay (0-2 um) = 12.29
% Fine Silt (2-3.9 um) = 9.22

d (0.1) : 1.663 **um**
d (0.5) : 17.180 **d (0.9) : 60.785**

Wentworth
% Clay (0-3.9 um) = 21.52
% Silt (3.91-31 um) = 47.21
% Coarse Silt (31 - 62.5 um) = 21.91
% Very Fine sand (62.5 - 125 um) = 7.35

% Fine sand (125-250 um) = .05
% Medium sand (250-500 um) = .19
% Coarse sand (500-1000 um) = .81
% Very Coarse sand (1000 - 2000 um) = .97



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.38	100
-0.5	(1414.21)	0.0	(1000.00)	0.59	99.62
0.0	(1000.00)	0.5	(707.10)	0.49	99.03
0.5	(707.10)	1.0	(500.00)	0.31	98.54
1.0	(500.00)	1.5	(353.55)	0.17	98.23
1.5	(353.55)	2.0	(250.00)	0.02	98.06
2.0	(250.00)	2.5	(176.78)	0	98.04
2.5	(176.78)	3.0	(125.00)	0.05	98.04
3.0	(125.00)	3.5	(88.39)	1.78	97.99
3.5	(88.39)	4.0	(62.50)	5.57	96.21
4.0	(62.50)	4.5	(44.19)	9.68	90.64
4.5	(44.19)	5.0	(31.25)	11.94	80.96
5.0	(31.25)	5.5	(22.10)	11.64	69.01
5.5	(22.10)	6.0	(15.63)	9.88	57.37
6.0	(15.63)	6.5	(11.05)	8.06	47.49
6.5	(11.05)	7.0	(7.81)	6.74	39.44
7.0	(7.81)	7.5	(5.52)	5.86	32.7
7.5	(5.52)	8.0	(3.90)	5.29	26.84

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.94	21.54
8.5	(2.76)	9.0	(1.95)	4.61	16.6
9.0	(1.95)	9.5	(1.38)	4.13	11.99
9.5	(1.38)	10.0	(0.98)	3.38	7.87
10.0	(0.98)	10.5	(0.69)	2.42	4.49
10.5	(0.69)	11.0	(0.49)	1.43	2.07
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-T1 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 12:08:37 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.91

D[4,3] = 50.56um = 4.31phi
D[v,0.05] = .93um = 10.06phi
D[v,0.16] = 2.08um = 8.91phi

D[v,0.5] = 11.2um = 6.48phi
D[v,0.84] = 42.7um = 4.55phi
D[v,0.95] = 82.08um = 3.61phi

Kurtosis = 39.51
Skewness = 6.12
Standard Deviation = 185.11 um = 2.43phi

Inclusive SD (Sorting Coeff.) = 2.07 phi (Very Poorly Sorted)
Inclusive Kurtosis = .84 phi (Platykurtic)

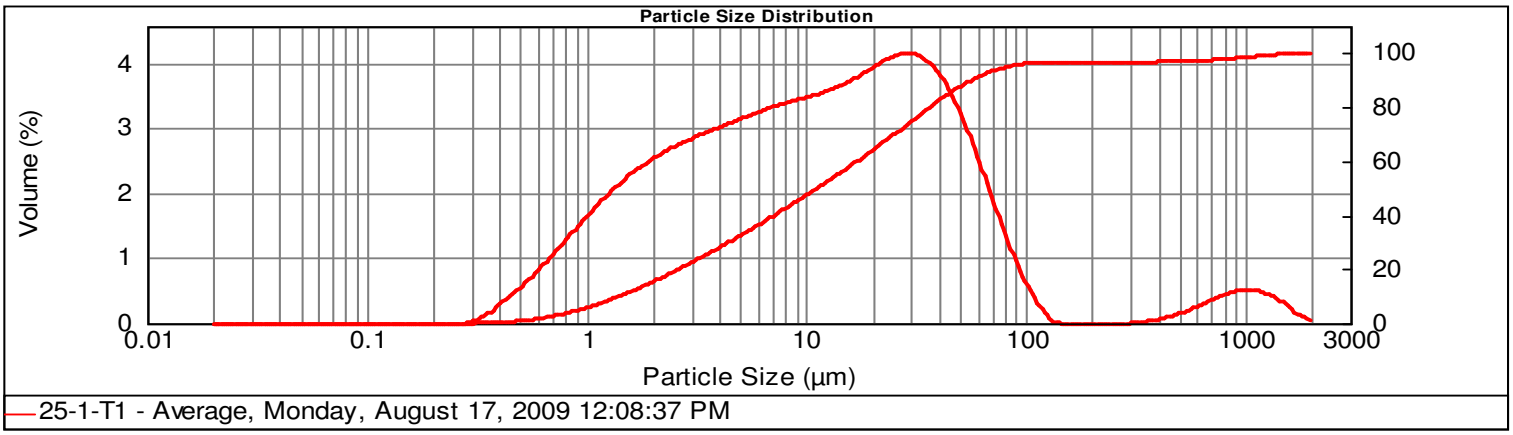
Inclusive Skewness = -0.11 (Coarse Skewed)
Inclusive Mean = 6.65 phi (Silt)

USGS
% Clay (0-2 um) = 15.31
% Fine Silt (2-3.9 um) = 12.12

d (0.1) : 1.414 **um**
d (0.5) : 11.195 **d (0.9) : 56.442**

Wentworth
% Clay (0-3.9 um) = 27.43
% Silt (3.91-31 um) = 48.24
% Coarse Silt (31 - 62.5 um) = 16.06
% Very Fine sand (62.5 - 125 um) = 4.98

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .18
% Coarse sand (500-1000 um) = 1.6
% Very Coarse sand (1000 - 2000 um) = 1.48



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.42	100
-0.5	(1414.21)	0.0	(1000.00)	1.06	99.58
0.0	(1000.00)	0.5	(707.10)	1.04	98.52
0.5	(707.10)	1.0	(500.00)	0.56	97.48
1.0	(500.00)	1.5	(353.55)	0.17	96.92
1.5	(353.55)	2.0	(250.00)	0.01	96.75
2.0	(250.00)	2.5	(176.78)	0	96.74
2.5	(176.78)	3.0	(125.00)	0.03	96.74
3.0	(125.00)	3.5	(88.39)	1.16	96.71
3.5	(88.39)	4.0	(62.50)	3.82	95.56
4.0	(62.50)	4.5	(44.19)	6.91	91.73
4.5	(44.19)	5.0	(31.25)	8.94	84.83
5.0	(31.25)	5.5	(22.10)	9.31	75.89
5.5	(22.10)	6.0	(15.63)	8.74	66.58
6.0	(15.63)	6.5	(11.05)	8.14	57.84
6.5	(11.05)	7.0	(7.81)	7.79	49.7
7.0	(7.81)	7.5	(5.52)	7.44	41.91
7.5	(5.52)	8.0	(3.90)	7.01	34.47

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.54	27.46
8.5	(2.76)	9.0	(1.95)	6	20.92
9.0	(1.95)	9.5	(1.38)	5.25	14.92
9.5	(1.38)	10.0	(0.98)	4.22	9.67
10.0	(0.98)	10.5	(0.69)	2.97	5.45
10.5	(0.69)	11.0	(0.49)	1.73	2.48
11.0	(0.49)	11.5	(0.35)	0.69	0.75
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 25-1-T2 - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 12:14:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.51

D[4,3] = 41.89um = 4.58phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.42um = 8.69phi

D[v,0.5] = 14.85um = 6.07phi
D[v,0.84] = 46.66um = 4.42phi
D[v,0.95] = 81.79um = 3.61phi

Kurtosis = 69.01
Skewness = 7.88
Standard Deviation = 144.49 um = 2.79phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

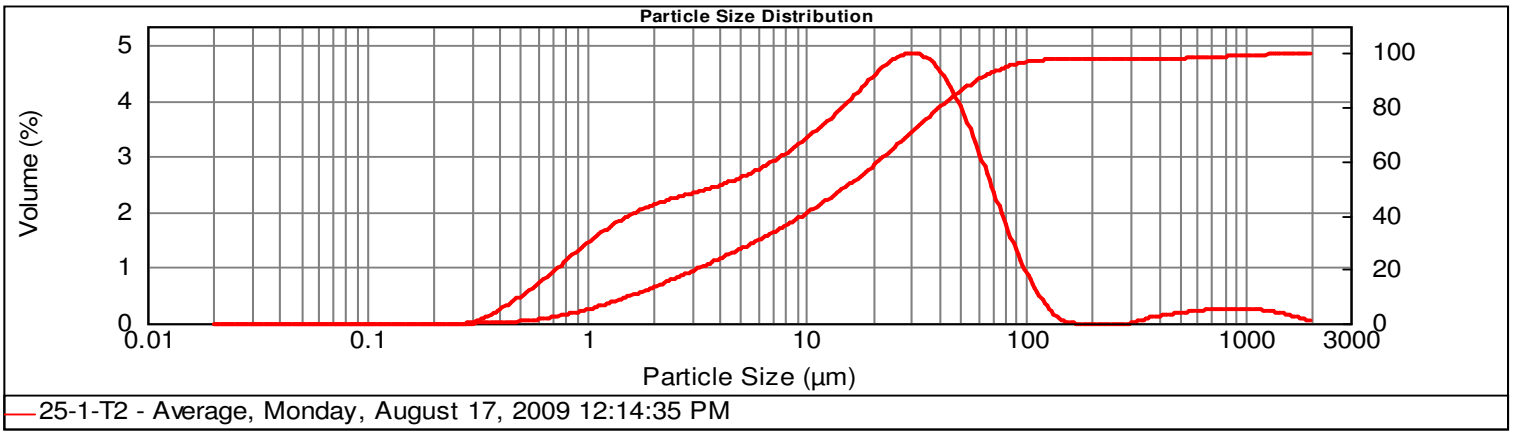
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 13.25
% Fine Silt (2-3.9 um) = 10.04

d (0.1) : 1.567 **um**
d (0.5) : 14.846 **d (0.9) : 59.812**

Wentworth
% Clay (0-3.9 um) = 23.3
% Silt (3.91-31 um) = 48.34
% Coarse Silt (31 - 62.5 um) = 19.24
% Very Fine sand (62.5 - 125 um) = 6.7

% Fine sand (125-250 um) = .17
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = 1.1
% Very Coarse sand (1000 - 2000 um) = .8



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.27	100
-0.5	(1414.21)	0.0	(1000.00)	0.53	99.73
0.0	(1000.00)	0.5	(707.10)	0.6	99.2
0.5	(707.10)	1.0	(500.00)	0.5	98.6
1.0	(500.00)	1.5	(353.55)	0.32	98.1
1.5	(353.55)	2.0	(250.00)	0.04	97.79
2.0	(250.00)	2.5	(176.78)	0	97.75
2.5	(176.78)	3.0	(125.00)	0.17	97.75
3.0	(125.00)	3.5	(88.39)	1.79	97.58
3.5	(88.39)	4.0	(62.50)	4.91	95.79
4.0	(62.50)	4.5	(44.19)	8.39	90.88
4.5	(44.19)	5.0	(31.25)	10.6	82.49
5.0	(31.25)	5.5	(22.10)	10.82	71.89
5.5	(22.10)	6.0	(15.63)	9.75	61.07
6.0	(15.63)	6.5	(11.05)	8.42	51.32
6.5	(11.05)	7.0	(7.81)	7.31	42.9
7.0	(7.81)	7.5	(5.52)	6.45	35.59
7.5	(5.52)	8.0	(3.90)	5.82	29.14

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.39	23.32
8.5	(2.76)	9.0	(1.95)	5.01	17.93
9.0	(1.95)	9.5	(1.38)	4.48	12.93
9.5	(1.38)	10.0	(0.98)	3.66	8.45
10.0	(0.98)	10.5	(0.69)	2.61	4.79
10.5	(0.69)	11.0	(0.49)	1.52	2.18
11.0	(0.49)	11.5	(0.35)	0.6	0.65
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 26-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:37:16 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.19

D[4,3] = 93.45um = 3.42phi
D[v,0.05] = 1.14um = 9.78phi
D[v,0.16] = 3.06um = 8.35phi

D[v,0.5] = 18.94um = 5.72phi
D[v,0.84] = 66.4um = 3.91phi
D[v,0.95] = 711.1um = .49phi

Kurtosis = 17.95
Skewness = 4.22
Standard Deviation = 268.4 um = 1.9phi

Inclusive SD (Sorting Coeff.) = 2.52 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.26 phi (Leptokurtic)

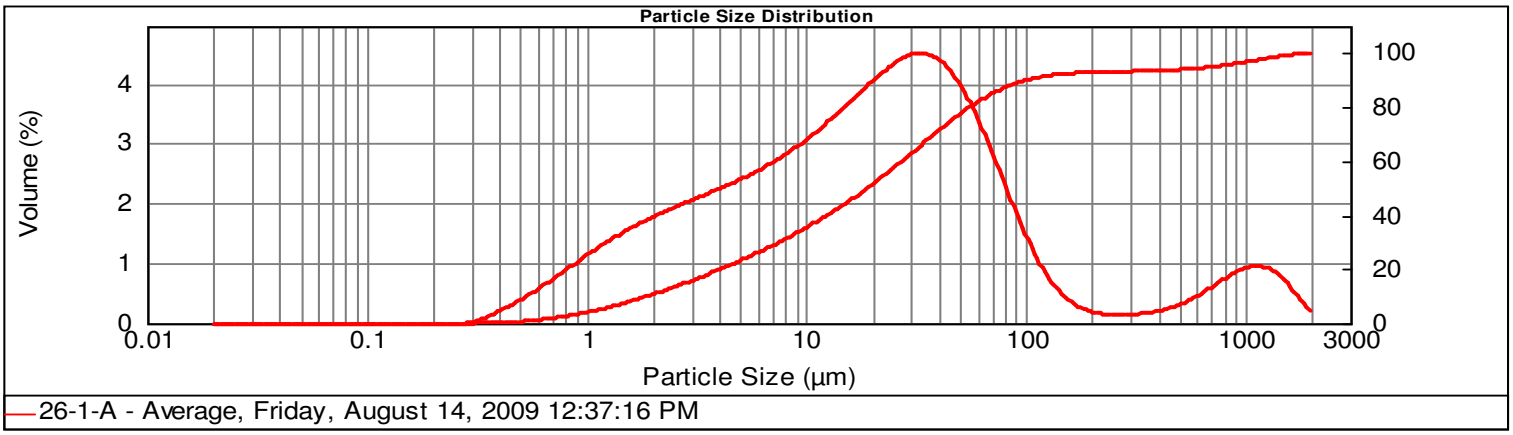
Inclusive Skewness = -0.03 (Near Symmetrical)
Inclusive Mean = 6 phi (Silt)

USGS
% Clay (0-2 um) = 10.67
% Fine Silt (2-3.9 um) = 8.74

d (0.1) : 1.886 **um**
d (0.5) : 18.945 **d (0.9) : 99.687**

Wentworth
% Clay (0-3.9 um) = 19.41
% Silt (3.91-31 um) = 44.35
% Coarse Silt (31 - 62.5 um) = 18.97
% Very Fine sand (62.5 - 125 um) = 8.9

% Fine sand (125-250 um) = 1.47
% Medium sand (250-500 um) = .85
% Coarse sand (500-1000 um) = 2.79
% Very Coarse sand (1000 - 2000 um) = 3.24



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	1.16	100
-0.5	(1414.21)	0.0	(1000.00)	2.09	98.84
0.0	(1000.00)	0.5	(707.10)	1.78	96.76
0.5	(707.10)	1.0	(500.00)	1.02	94.98
1.0	(500.00)	1.5	(353.55)	0.51	93.96
1.5	(353.55)	2.0	(250.00)	0.33	93.45
2.0	(250.00)	2.5	(176.78)	0.4	93.11
2.5	(176.78)	3.0	(125.00)	1.07	92.71
3.0	(125.00)	3.5	(88.39)	2.98	91.64
3.5	(88.39)	4.0	(62.50)	5.92	88.66
4.0	(62.50)	4.5	(44.19)	8.68	82.74
4.5	(44.19)	5.0	(31.25)	10.06	74.06
5.0	(31.25)	5.5	(22.10)	9.9	64
5.5	(22.10)	6.0	(15.63)	8.9	54.1
6.0	(15.63)	6.5	(11.05)	7.75	45.2
6.5	(11.05)	7.0	(7.81)	6.75	37.44
7.0	(7.81)	7.5	(5.52)	5.94	30.69
7.5	(5.52)	8.0	(3.90)	5.31	24.75

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.78	19.43
8.5	(2.76)	9.0	(1.95)	4.25	14.65
9.0	(1.95)	9.5	(1.38)	3.65	10.4
9.5	(1.38)	10.0	(0.98)	2.92	6.74
10.0	(0.98)	10.5	(0.69)	2.07	3.82
10.5	(0.69)	11.0	(0.49)	1.21	1.76
11.0	(0.49)	11.5	(0.35)	0.49	0.54
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 26-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:42:19 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.68

D[4,3] = 35.56um = 4.81phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.64um = 8.57phi

D[v,0.5] = 15.43um = 6.02phi
D[v,0.84] = 46.95um = 4.41phi
D[v,0.95] = 80.43um = 3.64phi

Kurtosis = 103.73
Skewness = 9.4
Standard Deviation = 110.58 um = 3.18phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

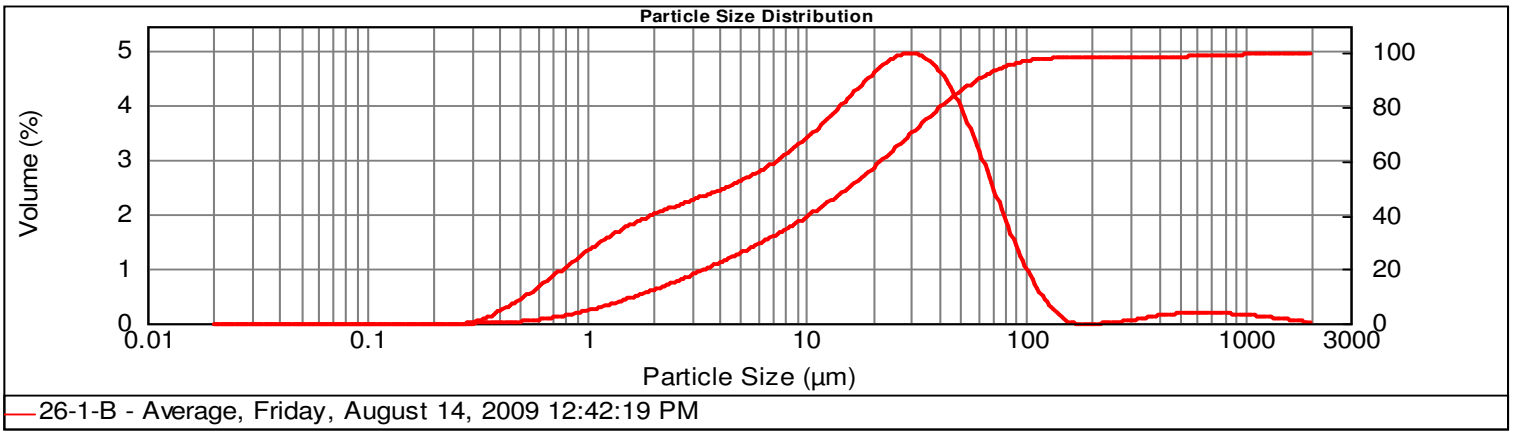
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.24
% Fine Silt (2-3.9 um) = 9.65

d (0.1) : 1.674 **um**
d (0.5) : 15.433 **d (0.9) : 59.875**

Wentworth
% Clay (0-3.9 um) = 21.88
% Silt (3.91-31 um) = 49.36
% Coarse Silt (31 - 62.5 um) = 19.65
% Very Fine sand (62.5 - 125 um) = 7.16

% Fine sand (125-250 um) = .27
% Medium sand (250-500 um) = .45
% Coarse sand (500-1000 um) = .82
% Very Coarse sand (1000 - 2000 um) = .41



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.12	100
-0.5	(1414.21)	0.0	(1000.00)	0.28	99.88
0.0	(1000.00)	0.5	(707.10)	0.4	99.59
0.5	(707.10)	1.0	(500.00)	0.43	99.2
1.0	(500.00)	1.5	(353.55)	0.34	98.77
1.5	(353.55)	2.0	(250.00)	0.12	98.43
2.0	(250.00)	2.5	(176.78)	0	98.32
2.5	(176.78)	3.0	(125.00)	0.26	98.31
3.0	(125.00)	3.5	(88.39)	2	98.05
3.5	(88.39)	4.0	(62.50)	5.16	96.05
4.0	(62.50)	4.5	(44.19)	8.6	90.89
4.5	(44.19)	5.0	(31.25)	10.79	82.29
5.0	(31.25)	5.5	(22.10)	11.09	71.5
5.5	(22.10)	6.0	(15.63)	10.08	60.41
6.0	(15.63)	6.5	(11.05)	8.7	50.34
6.5	(11.05)	7.0	(7.81)	7.46	41.64
7.0	(7.81)	7.5	(5.52)	6.49	34.18
7.5	(5.52)	8.0	(3.90)	5.78	27.69

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.24	21.91
8.5	(2.76)	9.0	(1.95)	4.74	16.67
9.0	(1.95)	9.5	(1.38)	4.16	11.93
9.5	(1.38)	10.0	(0.98)	3.38	7.77
10.0	(0.98)	10.5	(0.69)	2.41	4.4
10.5	(0.69)	11.0	(0.49)	1.4	1.99
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 26-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:47:16 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.11

D[4,3] = 36.67um = 4.77phi
D[v,0.05] = 1.05um = 9.89phi
D[v,0.16] = 2.64um = 8.57phi

D[v,0.5] = 15.42um = 6.02phi
D[v,0.84] = 46.39um = 4.43phi
D[v,0.95] = 78.33um = 3.67phi

Kurtosis = 95.95
Skewness = 9.17
Standard Deviation = 120.78 um = 3.05phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

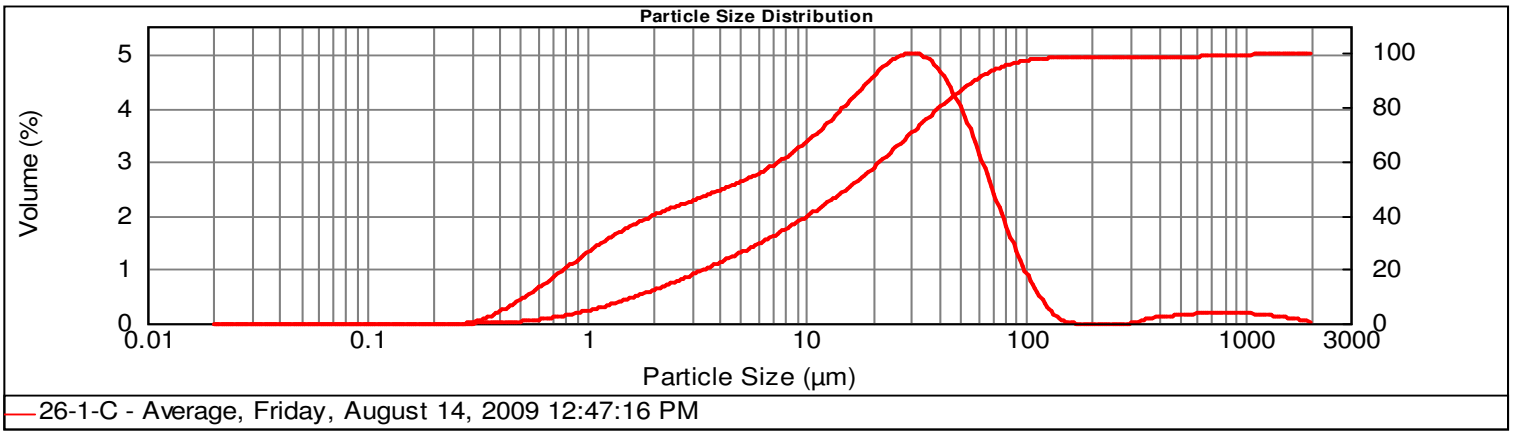
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.34 phi (Silt)

USGS
% Clay (0-2 um) = 12.2
% Fine Silt (2-3.9 um) = 9.73

d (0.1) : 1.681 **um**
d (0.5) : 15.421 **d (0.9) : 58.804**

Wentworth
% Clay (0-3.9 um) = 21.93
% Silt (3.91-31 um) = 49.44
% Coarse Silt (31 - 62.5 um) = 19.91
% Very Fine sand (62.5 - 125 um) = 6.87

% Fine sand (125-250 um) = .17
% Medium sand (250-500 um) = .31
% Coarse sand (500-1000 um) = .83
% Very Coarse sand (1000 - 2000 um) = .53



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.36	99.83
0.0	(1000.00)	0.5	(707.10)	0.44	99.47
0.5	(707.10)	1.0	(500.00)	0.4	99.03
1.0	(500.00)	1.5	(353.55)	0.27	98.63
1.5	(353.55)	2.0	(250.00)	0.03	98.36
2.0	(250.00)	2.5	(176.78)	0	98.33
2.5	(176.78)	3.0	(125.00)	0.17	98.33
3.0	(125.00)	3.5	(88.39)	1.81	98.15
3.5	(88.39)	4.0	(62.50)	5.06	96.34
4.0	(62.50)	4.5	(44.19)	8.67	91.28
4.5	(44.19)	5.0	(31.25)	10.97	82.61
5.0	(31.25)	5.5	(22.10)	11.21	71.64
5.5	(22.10)	6.0	(15.63)	10.08	60.43
6.0	(15.63)	6.5	(11.05)	8.63	50.35
6.5	(11.05)	7.0	(7.81)	7.42	41.72
7.0	(7.81)	7.5	(5.52)	6.51	34.3
7.5	(5.52)	8.0	(3.90)	5.83	27.79
8.0	(3.90)	8.5	(2.76)	5.29	21.96
8.5	(2.76)	9.0	(1.95)	4.77	16.66
9.0	(1.95)	9.5	(1.38)	4.16	11.89
9.5	(1.38)	10.0	(0.98)	3.36	7.72
10.0	(0.98)	10.5	(0.69)	2.38	4.36
10.5	(0.69)	11.0	(0.49)	1.39	1.98
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 26-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Friday, August 14, 2009 12:55:37 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.28

D[4,3] = 30.37um = 5.04phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 14.9um = 6.07phi
D[v,0.84] = 46.54um = 4.43phi
D[v,0.95] = 78.01um = 3.68phi

Kurtosis = 119.74
Skewness = 10.05
Standard Deviation = 80.54 um = 3.63phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .86 phi (Platykurtic)

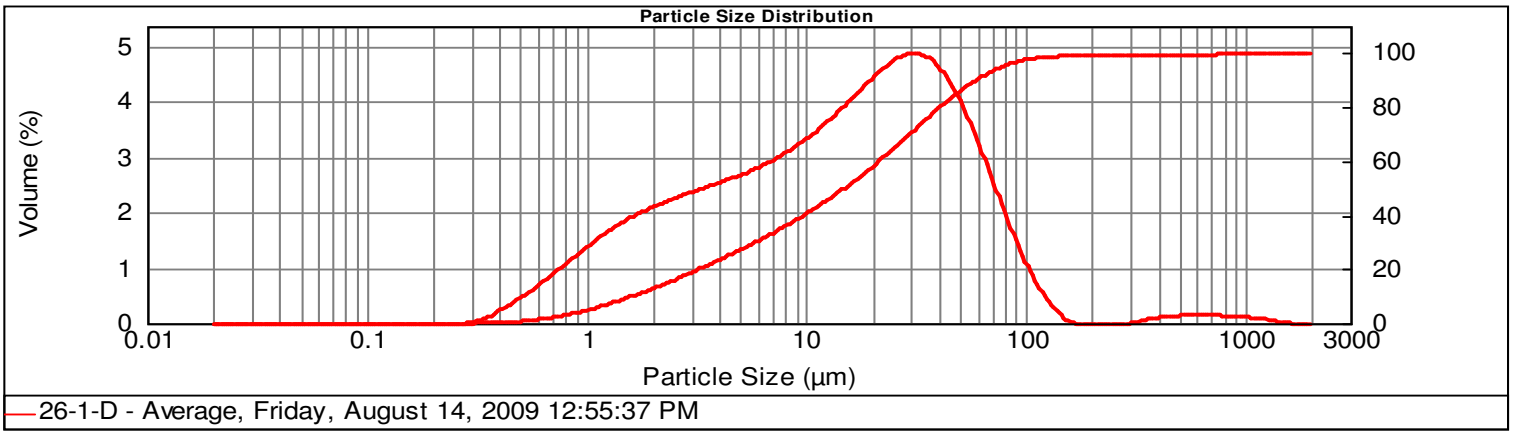
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 12.81
% Fine Silt (2-3.9 um) = 10.12

d (0.1) : 1.616 **um**
d (0.5) : 14.903 **d (0.9) : 59.083**

Wentworth
% Clay (0-3.9 um) = 22.93
% Silt (3.91-31 um) = 48.63
% Coarse Silt (31 - 62.5 um) = 19.63
% Very Fine sand (62.5 - 125 um) = 7.43

% Fine sand (125-250 um) = .3
% Medium sand (250-500 um) = .28
% Coarse sand (500-1000 um) = .62
% Very Coarse sand (1000 - 2000 um) = .18



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.01	100
-0.5	(1414.21)	0.0	(1000.00)	0.18	99.99
0.0	(1000.00)	0.5	(707.10)	0.29	99.82
0.5	(707.10)	1.0	(500.00)	0.33	99.53
1.0	(500.00)	1.5	(353.55)	0.25	99.2
1.5	(353.55)	2.0	(250.00)	0.03	98.95
2.0	(250.00)	2.5	(176.78)	0	98.92
2.5	(176.78)	3.0	(125.00)	0.3	98.92
3.0	(125.00)	3.5	(88.39)	2.12	98.62
3.5	(88.39)	4.0	(62.50)	5.3	96.5
4.0	(62.50)	4.5	(44.19)	8.67	91.2
4.5	(44.19)	5.0	(31.25)	10.71	82.53
5.0	(31.25)	5.5	(22.10)	10.84	71.82
5.5	(22.10)	6.0	(15.63)	9.76	60.98
6.0	(15.63)	6.5	(11.05)	8.43	51.23
6.5	(11.05)	7.0	(7.81)	7.34	42.79
7.0	(7.81)	7.5	(5.52)	6.54	35.45
7.5	(5.52)	8.0	(3.90)	5.95	28.91

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.48	22.96
8.5	(2.76)	9.0	(1.95)	4.99	17.48
9.0	(1.95)	9.5	(1.38)	4.38	12.49
9.5	(1.38)	10.0	(0.98)	3.54	8.11
10.0	(0.98)	10.5	(0.69)	2.51	4.57
10.5	(0.69)	11.0	(0.49)	1.45	2.06
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 26-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 1:00:26 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.35

D[4,3] = 28.2um = 5.15phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 14.67um = 6.09phi
D[v,0.84] = 45.89um = 4.45phi
D[v,0.95] = 76.21um = 3.71phi

Kurtosis = 109.41
Skewness = 9.53
Standard Deviation = 64.96 um = 3.94phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .86 phi (Platykurtic)

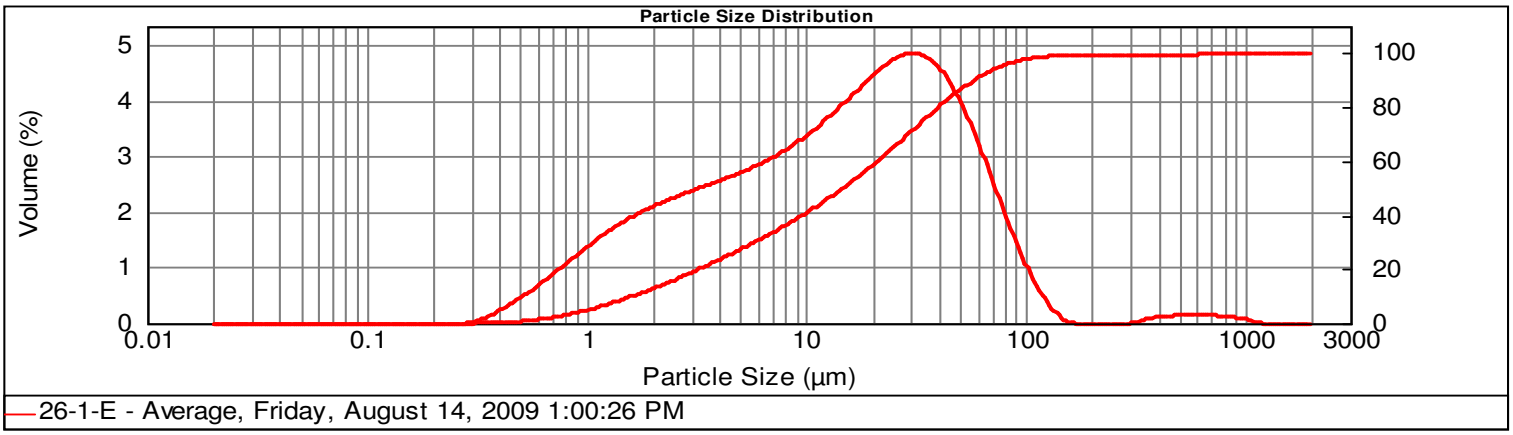
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.39 phi (Silt)

USGS
% Clay (0-2 um) = 12.81
% Fine Silt (2-3.9 um) = 10.17

d (0.1) : 1.616 **um**
d (0.5) : 14.669 **d (0.9) : 58.125**

Wentworth
% Clay (0-3.9 um) = 22.98
% Silt (3.91-31 um) = 49.04
% Coarse Silt (31 - 62.5 um) = 19.52
% Very Fine sand (62.5 - 125 um) = 7.29

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = .59
% Very Coarse sand (1000 - 2000 um) = .04



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.04	100
0.0	(1000.00)	0.5	(707.10)	0.26	99.96
0.5	(707.10)	1.0	(500.00)	0.33	99.7
1.0	(500.00)	1.5	(353.55)	0.26	99.37
1.5	(353.55)	2.0	(250.00)	0.03	99.11
2.0	(250.00)	2.5	(176.78)	0	99.07
2.5	(176.78)	3.0	(125.00)	0.23	99.07
3.0	(125.00)	3.5	(88.39)	2.03	98.84
3.5	(88.39)	4.0	(62.50)	5.26	96.81
4.0	(62.50)	4.5	(44.19)	8.62	91.55
4.5	(44.19)	5.0	(31.25)	10.65	82.93
5.0	(31.25)	5.5	(22.10)	10.82	72.28
5.5	(22.10)	6.0	(15.63)	9.81	61.46
6.0	(15.63)	6.5	(11.05)	8.54	51.65
6.5	(11.05)	7.0	(7.81)	7.45	43.11
7.0	(7.81)	7.5	(5.52)	6.63	35.66
7.5	(5.52)	8.0	(3.90)	6.02	29.03
8.0	(3.90)	8.5	(2.76)	5.52	23.01
8.5	(2.76)	9.0	(1.95)	5.01	17.49
9.0	(1.95)	9.5	(1.38)	4.37	12.49
9.5	(1.38)	10.0	(0.98)	3.53	8.11
10.0	(0.98)	10.5	(0.69)	2.5	4.58
10.5	(0.69)	11.0	(0.49)	1.46	2.08
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 26-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 1:04:57 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.78

D[4,3] = 35.05um = 4.83phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.65um = 8.56phi

D[v,0.5] = 15.95um = 5.97phi
D[v,0.84] = 46.96um = 4.41phi
D[v,0.95] = 78.57um = 3.67phi

Kurtosis = 109.47
Skewness = 9.69
Standard Deviation = 108.93 um = 3.2phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

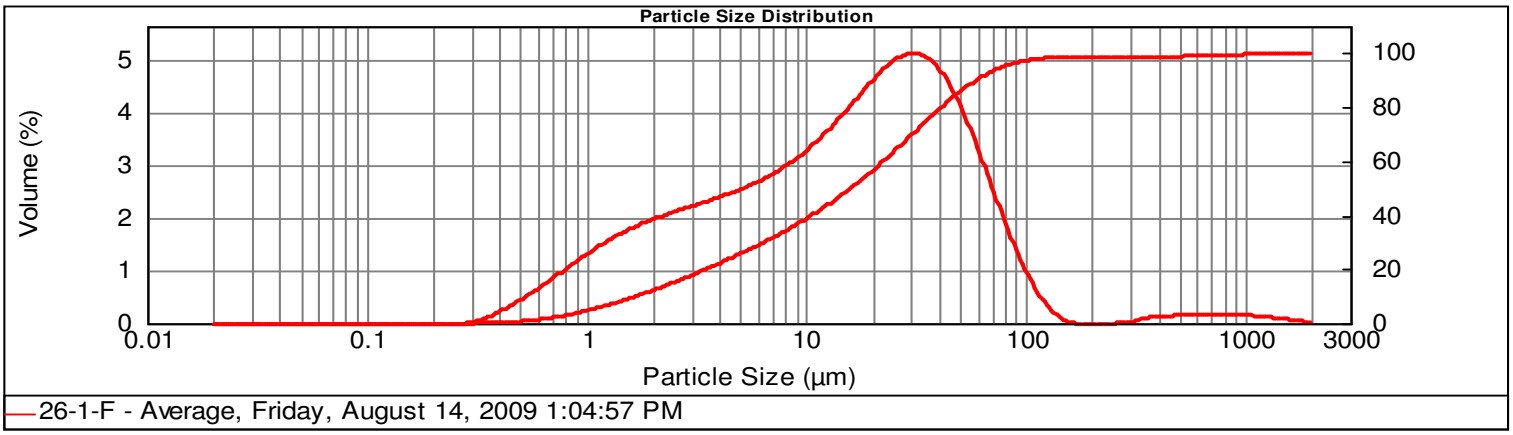
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.31 phi (Silt)

USGS
% Clay (0-2 um) = 12.2
% Fine Silt (2-3.9 um) = 9.53

d (0.1) : 1.677 **um**
d (0.5) : 15.947 **d (0.9) : 59.304**

Wentworth
% Clay (0-3.9 um) = 21.73
% Silt (3.91-31 um) = 48.98
% Coarse Silt (31 - 62.5 um) = 20.42
% Very Fine sand (62.5 - 125 um) = 7.13

% Fine sand (125-250 um) = .22
% Medium sand (250-500 um) = .36
% Coarse sand (500-1000 um) = .76
% Very Coarse sand (1000 - 2000 um) = .41



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.12	100
-0.5	(1414.21)	0.0	(1000.00)	0.28	99.88
0.0	(1000.00)	0.5	(707.10)	0.38	99.59
0.5	(707.10)	1.0	(500.00)	0.38	99.21
1.0	(500.00)	1.5	(353.55)	0.29	98.83
1.5	(353.55)	2.0	(250.00)	0.07	98.54
2.0	(250.00)	2.5	(176.78)	0	98.47
2.5	(176.78)	3.0	(125.00)	0.22	98.47
3.0	(125.00)	3.5	(88.39)	1.91	98.26
3.5	(88.39)	4.0	(62.50)	5.22	96.35
4.0	(62.50)	4.5	(44.19)	8.91	91.13
4.5	(44.19)	5.0	(31.25)	11.23	82.22
5.0	(31.25)	5.5	(22.10)	11.41	70.98
5.5	(22.10)	6.0	(15.63)	10.13	59.57
6.0	(15.63)	6.5	(11.05)	8.53	49.45
6.5	(11.05)	7.0	(7.81)	7.22	40.92
7.0	(7.81)	7.5	(5.52)	6.3	33.7
7.5	(5.52)	8.0	(3.90)	5.66	27.41

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.16	21.75
8.5	(2.76)	9.0	(1.95)	4.69	16.59
9.0	(1.95)	9.5	(1.38)	4.13	11.9
9.5	(1.38)	10.0	(0.98)	3.36	7.76
10.0	(0.98)	10.5	(0.69)	2.4	4.4
10.5	(0.69)	11.0	(0.49)	1.4	2
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 27-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 3:02:21 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.44

D[4,3] = 49.35um = 4.34phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.52um = 8.64phi

D[v,0.5] = 14.04um = 6.15phi
D[v,0.84] = 49.21um = 4.34phi
D[v,0.95] = 109.07um = 3.2phi

Kurtosis = 52.14
Skewness = 6.87
Standard Deviation = 166.47 um = 2.59phi

Inclusive SD (Sorting Coeff.) = 2.09 phi (Very Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

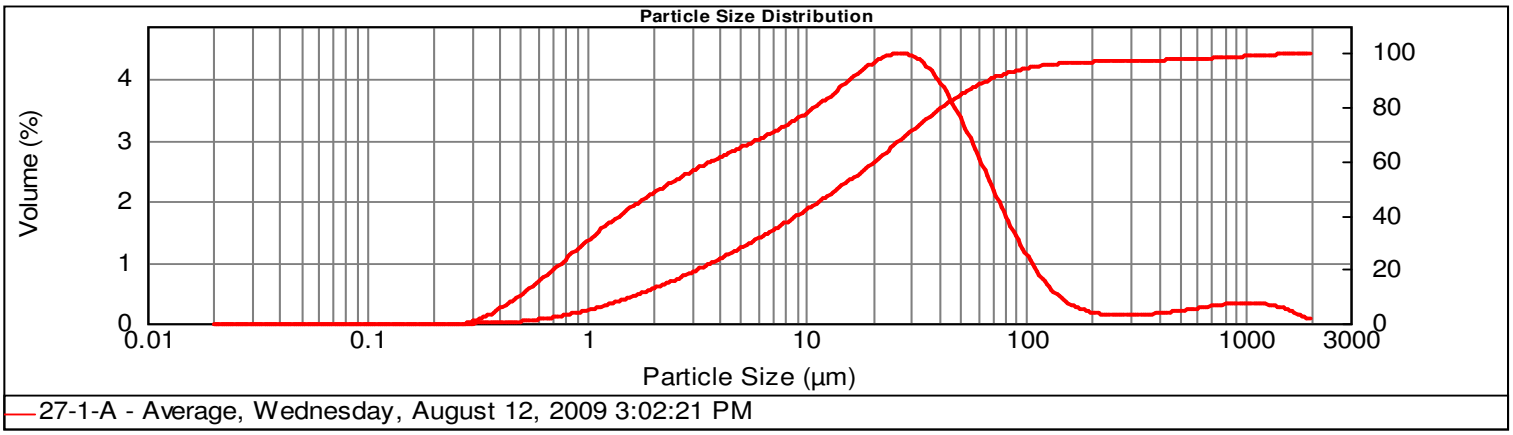
Inclusive Skewness = -0.14 (Coarse Skewed)
Inclusive Mean = 6.38 phi (Silt)

USGS
% Clay (0-2 um) = 12.66
% Fine Silt (2-3.9 um) = 10.55

d (0.1) : 1.636 **um**
d (0.5) : 14.038 **d (0.9) : 67.458**

Wentworth
% Clay (0-3.9 um) = 23.21
% Silt (3.91-31 um) = 48.72
% Coarse Silt (31 - 62.5 um) = 16.81
% Very Fine sand (62.5 - 125 um) = 6.93

% Fine sand (125-250 um) = 1.27
% Medium sand (250-500 um) = .68
% Coarse sand (500-1000 um) = 1.27
% Very Coarse sand (1000 - 2000 um) = 1.1



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.39	100
-0.5	(1414.21)	0.0	(1000.00)	0.71	99.61
0.0	(1000.00)	0.5	(707.10)	0.72	98.9
0.5	(707.10)	1.0	(500.00)	0.55	98.18
1.0	(500.00)	1.5	(353.55)	0.39	97.63
1.5	(353.55)	2.0	(250.00)	0.29	97.24
2.0	(250.00)	2.5	(176.78)	0.37	96.95
2.5	(176.78)	3.0	(125.00)	0.9	96.58
3.0	(125.00)	3.5	(88.39)	2.31	95.68
3.5	(88.39)	4.0	(62.50)	4.62	93.38
4.0	(62.50)	4.5	(44.19)	7.28	88.75
4.5	(44.19)	5.0	(31.25)	9.31	81.48
5.0	(31.25)	5.5	(22.10)	9.98	72.17
5.5	(22.10)	6.0	(15.63)	9.46	62.19
6.0	(15.63)	6.5	(11.05)	8.5	52.73
6.5	(11.05)	7.0	(7.81)	7.64	44.23
7.0	(7.81)	7.5	(5.52)	6.97	36.59
7.5	(5.52)	8.0	(3.90)	6.39	29.63

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.79	23.24
8.5	(2.76)	9.0	(1.95)	5.12	17.45
9.0	(1.95)	9.5	(1.38)	4.36	12.33
9.5	(1.38)	10.0	(0.98)	3.46	7.97
10.0	(0.98)	10.5	(0.69)	2.44	4.51
10.5	(0.69)	11.0	(0.49)	1.43	2.07
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 27-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 3:09:39 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.52

D[4,3] = 25.53um = 5.29phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.82um = 8.47phi

D[v,0.5] = 16.16um = 5.95phi
D[v,0.84] = 47.06um = 4.41phi
D[v,0.95] = 77.16um = 3.7phi

Kurtosis = 99.63
Skewness = 7.43
Standard Deviation = 35.14 um = 4.83phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

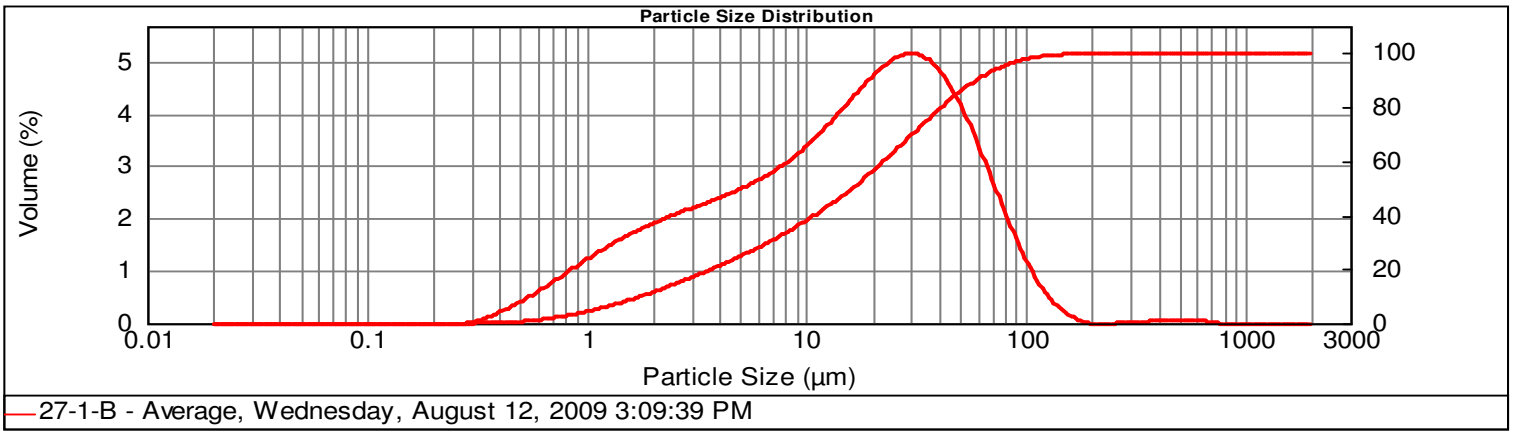
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.28 phi (Silt)

USGS
% Clay (0-2 um) = 11.43
% Fine Silt (2-3.9 um) = 9.35

d (0.1) : 1.777 **um**
d (0.5) : 16.161 **d (0.9) : 59.285**

Wentworth
% Clay (0-3.9 um) = 20.78
% Silt (3.91-31 um) = 49.87
% Coarse Silt (31 - 62.5 um) = 20.51
% Very Fine sand (62.5 - 125 um) = 8

% Fine sand (125-250 um) = .55
% Medium sand (250-500 um) = .17
% Coarse sand (500-1000 um) = .11
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0.11	100
1.0	(500.00)	1.5	(353.55)	0.13	99.89
1.5	(353.55)	2.0	(250.00)	0.04	99.76
2.0	(250.00)	2.5	(176.78)	0	99.72
2.5	(176.78)	3.0	(125.00)	0.55	99.72
3.0	(125.00)	3.5	(88.39)	2.41	99.17
3.5	(88.39)	4.0	(62.50)	5.6	96.77
4.0	(62.50)	4.5	(44.19)	9.02	91.17
4.5	(44.19)	5.0	(31.25)	11.22	82.15
5.0	(31.25)	5.5	(22.10)	11.5	70.93
5.5	(22.10)	6.0	(15.63)	10.36	59.42
6.0	(15.63)	6.5	(11.05)	8.79	49.06
6.5	(11.05)	7.0	(7.81)	7.41	40.27
7.0	(7.81)	7.5	(5.52)	6.39	32.87
7.5	(5.52)	8.0	(3.90)	5.67	26.48

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.11	20.81
8.5	(2.76)	9.0	(1.95)	4.56	15.7
9.0	(1.95)	9.5	(1.38)	3.93	11.14
9.5	(1.38)	10.0	(0.98)	3.14	7.21
10.0	(0.98)	10.5	(0.69)	2.22	4.07
10.5	(0.69)	11.0	(0.49)	1.29	1.86
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 27-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured:
Wednesday, August 12, 2009
3:25:13 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.96

D[4,3] = 42.23um = 4.57phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.64um = 8.57phi

D[v,0.5] = 15.8um = 5.98phi
D[v,0.84] = 49.17um = 4.35phi
D[v,0.95] = 90.23um = 3.47phi

Kurtosis = 67.8
Skewness = 7.64
Standard Deviation = 131.48 um = 2.93phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

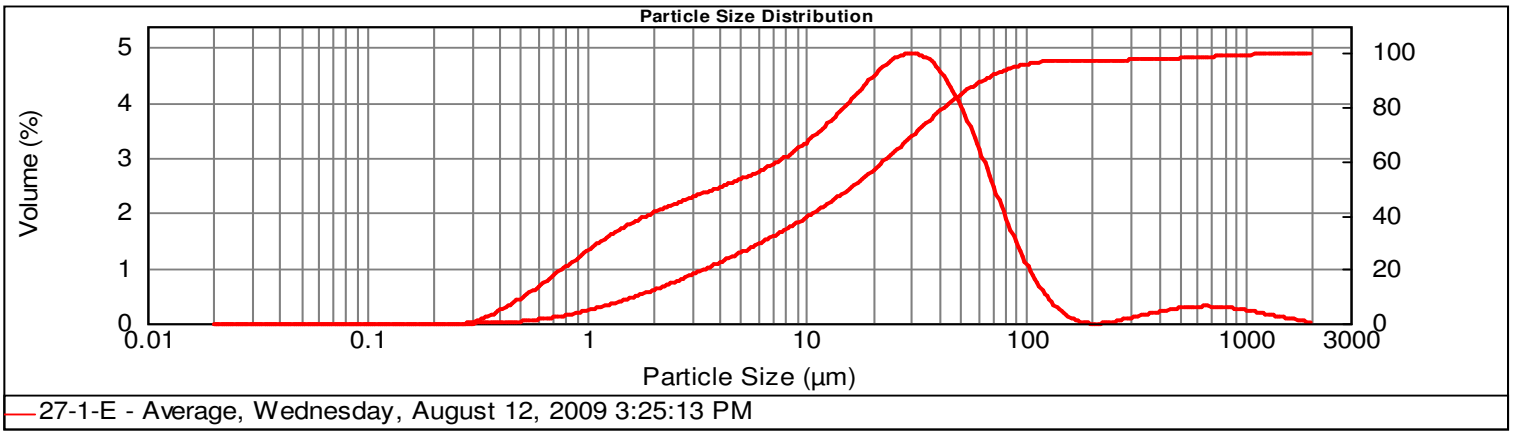
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.3 phi (Silt)

USGS
% Clay (0-2 um) = 12.22
% Fine Silt (2-3.9 um) = 9.72

d (0.1) : 1.677 **um**
d (0.5) : 15.803 **d (0.9) : 63.791**

Wentworth
% Clay (0-3.9 um) = 21.94
% Silt (3.91-31 um) = 48.21
% Coarse Silt (31 - 62.5 um) = 19.45
% Very Fine sand (62.5 - 125 um) = 7.36

% Fine sand (125-250 um) = .46
% Medium sand (250-500 um) = .71
% Coarse sand (500-1000 um) = 1.31
% Very Coarse sand (1000 - 2000 um) = .56



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.16	100
-0.5	(1414.21)	0.0	(1000.00)	0.41	99.84
0.0	(1000.00)	0.5	(707.10)	0.63	99.44
0.5	(707.10)	1.0	(500.00)	0.68	98.81
1.0	(500.00)	1.5	(353.55)	0.5	98.13
1.5	(353.55)	2.0	(250.00)	0.22	97.63
2.0	(250.00)	2.5	(176.78)	0.01	97.42
2.5	(176.78)	3.0	(125.00)	0.45	97.41
3.0	(125.00)	3.5	(88.39)	2.16	96.96
3.5	(88.39)	4.0	(62.50)	5.2	94.8
4.0	(62.50)	4.5	(44.19)	8.53	89.6
4.5	(44.19)	5.0	(31.25)	10.67	81.07
5.0	(31.25)	5.5	(22.10)	10.9	70.4
5.5	(22.10)	6.0	(15.63)	9.8	59.5
6.0	(15.63)	6.5	(11.05)	8.37	49.7
6.5	(11.05)	7.0	(7.81)	7.2	41.33
7.0	(7.81)	7.5	(5.52)	6.38	34.13
7.5	(5.52)	8.0	(3.90)	5.79	27.75
8.0	(3.90)	8.5	(2.76)	5.29	21.96
8.5	(2.76)	9.0	(1.95)	4.76	16.67
9.0	(1.95)	9.5	(1.38)	4.15	11.91
9.5	(1.38)	10.0	(0.98)	3.35	7.76
10.0	(0.98)	10.5	(0.69)	2.39	4.42
10.5	(0.69)	11.0	(0.49)	1.41	2.03
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 27-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 3:29:57 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.40

D[4,3] = 32.22um = 4.96phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.67um = 8.55phi

D[v,0.5] = 16.08um = 5.96phi
D[v,0.84] = 48um = 4.38phi
D[v,0.95] = 79.84um = 3.65phi

Kurtosis = 129.21
Skewness = 10.28
Standard Deviation = 87.42 um = 3.52phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

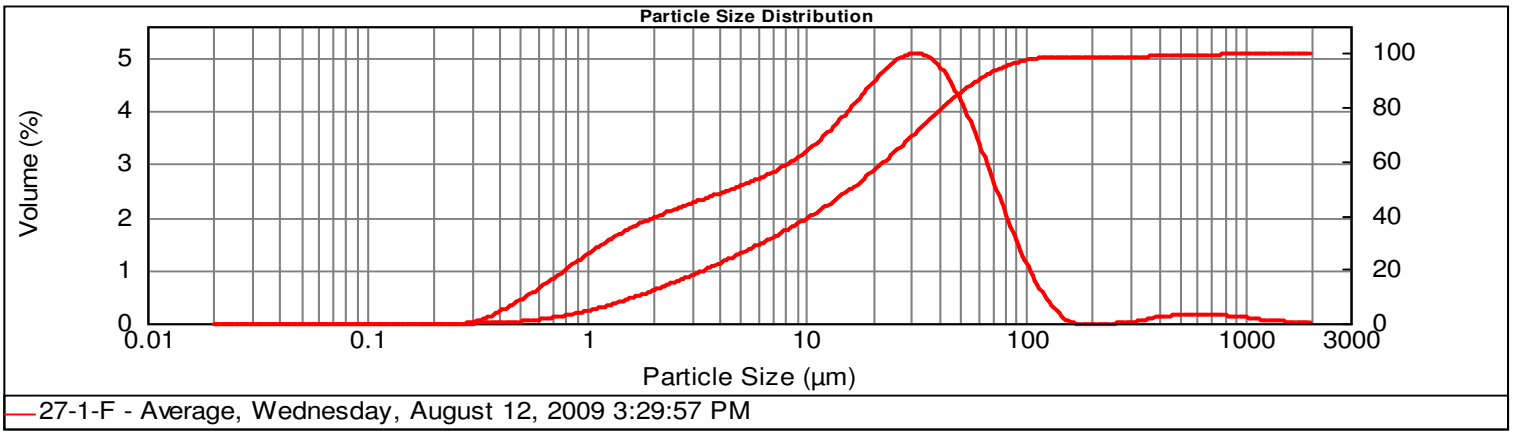
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.3 phi (Silt)

USGS
% Clay (0-2 um) = 12.06
% Fine Silt (2-3.9 um) = 9.65

d (0.1) : 1.698 **um**
d (0.5) : 16.079 **d (0.9) : 60.631**

Wentworth
% Clay (0-3.9 um) = 21.7
% Silt (3.91-31 um) = 48.4
% Coarse Silt (31 - 62.5 um) = 20.57
% Very Fine sand (62.5 - 125 um) = 7.81

% Fine sand (125-250 um) = .31
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = .67
% Very Coarse sand (1000 - 2000 um) = .21



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.04	100
-0.5	(1414.21)	0.0	(1000.00)	0.17	99.96
0.0	(1000.00)	0.5	(707.10)	0.31	99.79
0.5	(707.10)	1.0	(500.00)	0.36	99.48
1.0	(500.00)	1.5	(353.55)	0.28	99.12
1.5	(353.55)	2.0	(250.00)	0.05	98.84
2.0	(250.00)	2.5	(176.78)	0	98.79
2.5	(176.78)	3.0	(125.00)	0.31	98.79
3.0	(125.00)	3.5	(88.39)	2.23	98.48
3.5	(88.39)	4.0	(62.50)	5.58	96.25
4.0	(62.50)	4.5	(44.19)	9.1	90.67
4.5	(44.19)	5.0	(31.25)	11.2	81.57
5.0	(31.25)	5.5	(22.10)	11.22	70.37
5.5	(22.10)	6.0	(15.63)	9.9	59.14
6.0	(15.63)	6.5	(11.05)	8.34	49.24
6.5	(11.05)	7.0	(7.81)	7.13	40.9
7.0	(7.81)	7.5	(5.52)	6.31	33.77
7.5	(5.52)	8.0	(3.90)	5.73	27.46
8.0	(3.90)	8.5	(2.76)	5.24	21.73
8.5	(2.76)	9.0	(1.95)	4.73	16.48
9.0	(1.95)	9.5	(1.38)	4.12	11.75
9.5	(1.38)	10.0	(0.98)	3.32	7.63
10.0	(0.98)	10.5	(0.69)	2.35	4.31
10.5	(0.69)	11.0	(0.49)	1.37	1.96
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 28-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 3:51:52 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.68

D[4,3] = 21.56um = 5.54phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.42um = 8.69phi

D[v,0.5] = 14.09um = 6.15phi
D[v,0.84] = 42.25um = 4.56phi
D[v,0.95] = 67.51um = 3.89phi

Kurtosis = 2.6
Skewness = 1.56
Standard Deviation = 22.28 um = 5.49phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .86 phi (Platykurtic)

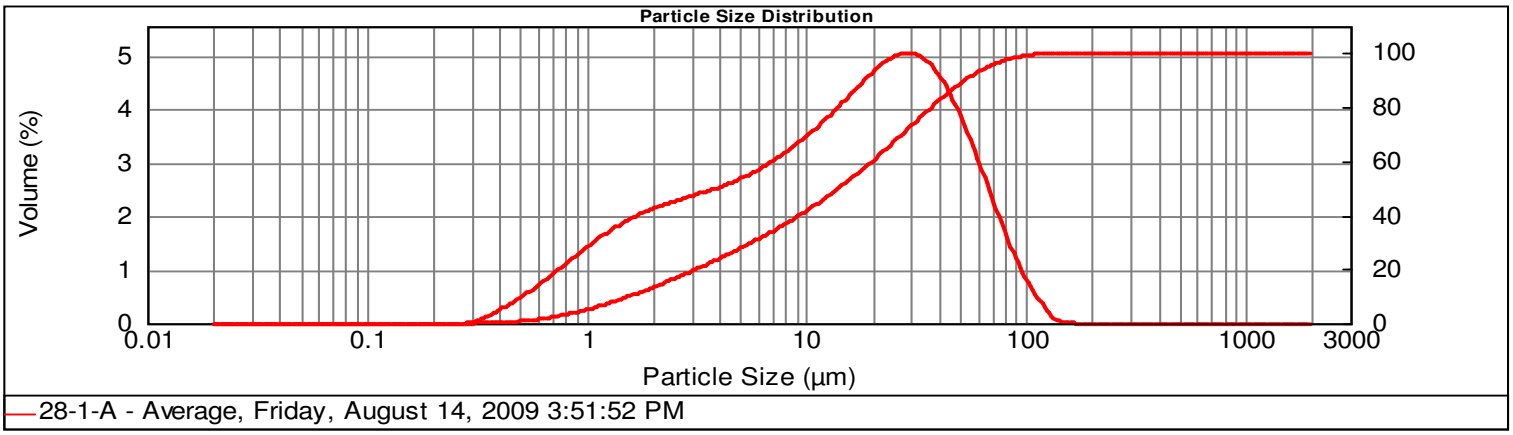
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.47 phi (Silt)

USGS
% Clay (0-2 um) = 13.25
% Fine Silt (2-3.9 um) = 10.2

d (0.1) : 1.569 **um**
d (0.5) : 14.090 **d (0.9) : 52.790**

Wentworth
% Clay (0-3.9 um) = 23.45
% Silt (3.91-31 um) = 50.75
% Coarse Silt (31 - 62.5 um) = 19.43
% Very Fine sand (62.5 - 125 um) = 6.27

% Fine sand (125-250 um) = .09
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.09	100
3.0	(125.00)	3.5	(88.39)	1.59	99.91
3.5	(88.39)	4.0	(62.50)	4.68	98.32
4.0	(62.50)	4.5	(44.19)	8.33	93.63
4.5	(44.19)	5.0	(31.25)	10.84	85.3
5.0	(31.25)	5.5	(22.10)	11.33	74.47
5.5	(22.10)	6.0	(15.63)	10.33	63.14
6.0	(15.63)	6.5	(11.05)	8.92	52.81
6.5	(11.05)	7.0	(7.81)	7.69	43.88
7.0	(7.81)	7.5	(5.52)	6.72	36.19
7.5	(5.52)	8.0	(3.90)	6	29.47
8.0	(3.90)	8.5	(2.76)	5.5	23.48
8.5	(2.76)	9.0	(1.95)	5.06	17.98
9.0	(1.95)	9.5	(1.38)	4.49	12.92
9.5	(1.38)	10.0	(0.98)	3.65	8.43
10.0	(0.98)	10.5	(0.69)	2.6	4.78
10.5	(0.69)	11.0	(0.49)	1.52	2.18
11.0	(0.49)	11.5	(0.35)	0.61	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 28-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 3:56:23 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.71

D[4,3] = 35.15um = 4.83phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.44um = 8.68phi

D[v,0.5] = 15.04um = 6.05phi
D[v,0.84] = 43.78um = 4.51phi
D[v,0.95] = 71.42um = 3.81phi

Kurtosis = 100.26
Skewness = 9.51
Standard Deviation = 124.03 um = 3.01phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

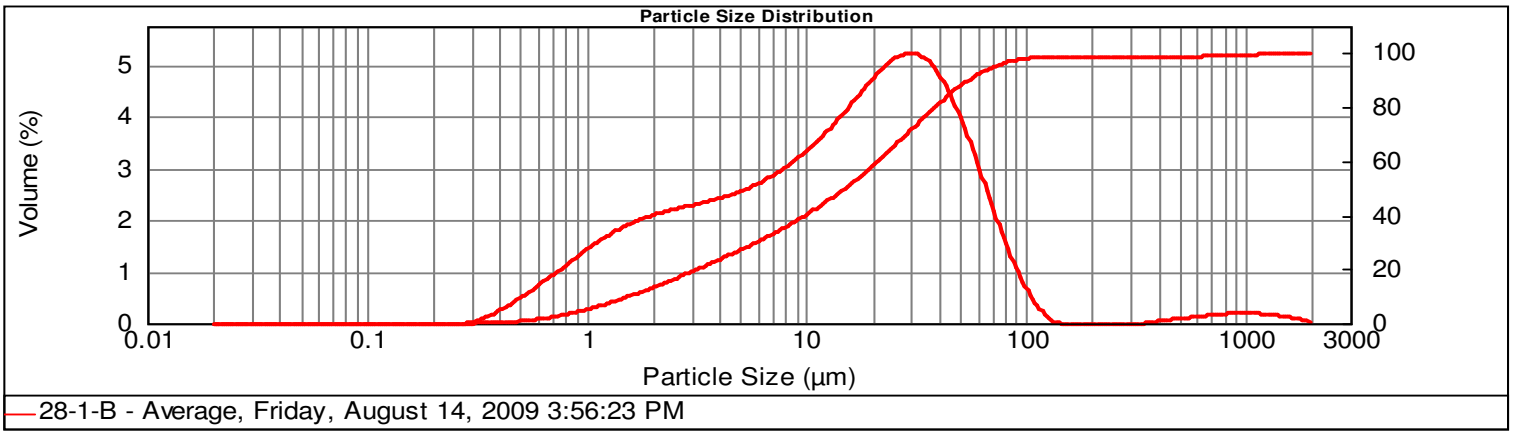
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 13.21
% Fine Silt (2-3.9 um) = 9.83

d (0.1) : 1.566 **um**
d (0.5) : 15.042 **d (0.9) : 54.778**

Wentworth
% Clay (0-3.9 um) = 23.04
% Silt (3.91-31 um) = 49.7
% Coarse Silt (31 - 62.5 um) = 20.05
% Very Fine sand (62.5 - 125 um) = 5.76

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .12
% Coarse sand (500-1000 um) = .69
% Very Coarse sand (1000 - 2000 um) = .61



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.21	100
-0.5	(1414.21)	0.0	(1000.00)	0.4	99.79
0.0	(1000.00)	0.5	(707.10)	0.41	99.39
0.5	(707.10)	1.0	(500.00)	0.28	98.97
1.0	(500.00)	1.5	(353.55)	0.12	98.69
1.5	(353.55)	2.0	(250.00)	0	98.58
2.0	(250.00)	2.5	(176.78)	0	98.58
2.5	(176.78)	3.0	(125.00)	0.03	98.58
3.0	(125.00)	3.5	(88.39)	1.26	98.55
3.5	(88.39)	4.0	(62.50)	4.5	97.29
4.0	(62.50)	4.5	(44.19)	8.51	92.79
4.5	(44.19)	5.0	(31.25)	11.26	84.28
5.0	(31.25)	5.5	(22.10)	11.64	73.02
5.5	(22.10)	6.0	(15.63)	10.35	61.37
6.0	(15.63)	6.5	(11.05)	8.66	51.03
6.5	(11.05)	7.0	(7.81)	7.3	42.37
7.0	(7.81)	7.5	(5.52)	6.33	35.07
7.5	(5.52)	8.0	(3.90)	5.67	28.74
8.0	(3.90)	8.5	(2.76)	5.26	23.07
8.5	(2.76)	9.0	(1.95)	4.92	17.8
9.0	(1.95)	9.5	(1.38)	4.42	12.89
9.5	(1.38)	10.0	(0.98)	3.64	8.47
10.0	(0.98)	10.5	(0.69)	2.62	4.83
10.5	(0.69)	11.0	(0.49)	1.54	2.21
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 28-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:00:47 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.60

D[4,3] = 40.56um = 4.62phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.43um = 8.69phi

D[v,0.5] = 14.76um = 6.08phi
D[v,0.84] = 44.18um = 4.5phi
D[v,0.95] = 74.36um = 3.75phi

Kurtosis = 70.98
Skewness = 8.08
Standard Deviation = 147.61 um = 2.76phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

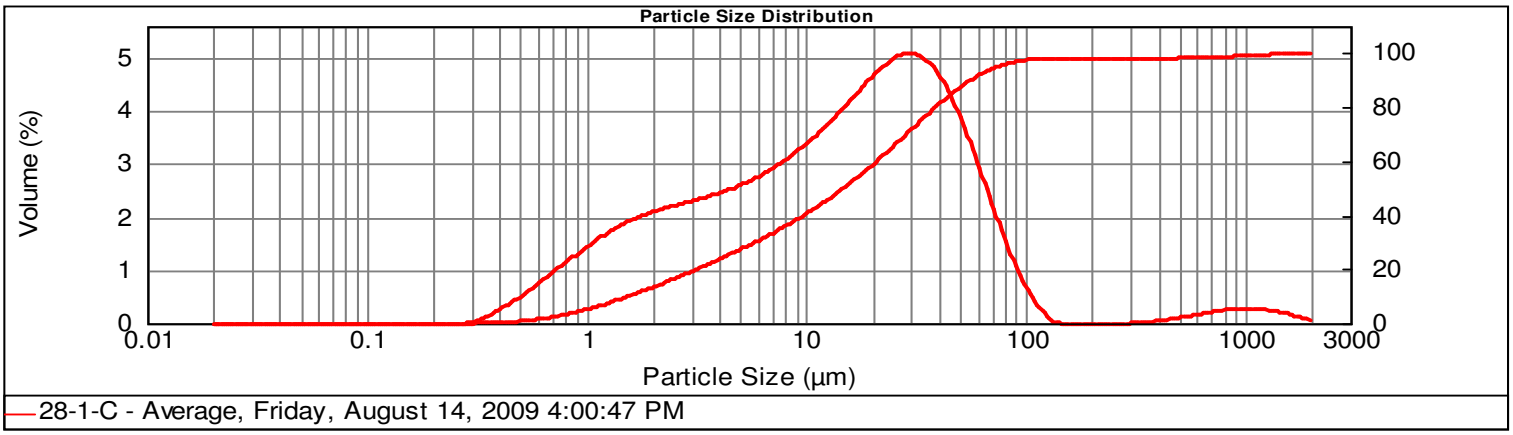
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 13.29
% Fine Silt (2-3.9 um) = 9.89

d (0.1) : 1.557 **um**
d (0.5) : 14.764 **d (0.9) : 55.826**

Wentworth
% Clay (0-3.9 um) = 23.18
% Silt (3.91-31 um) = 49.63
% Coarse Silt (31 - 62.5 um) = 19.49
% Very Fine sand (62.5 - 125 um) = 5.71

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .13
% Coarse sand (500-1000 um) = .94
% Very Coarse sand (1000 - 2000 um) = .89



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.31	100
-0.5	(1414.21)	0.0	(1000.00)	0.58	99.69
0.0	(1000.00)	0.5	(707.10)	0.58	99.11
0.5	(707.10)	1.0	(500.00)	0.36	98.53
1.0	(500.00)	1.5	(353.55)	0.13	98.17
1.5	(353.55)	2.0	(250.00)	0	98.04
2.0	(250.00)	2.5	(176.78)	0	98.04
2.5	(176.78)	3.0	(125.00)	0.03	98.04
3.0	(125.00)	3.5	(88.39)	1.28	98.01
3.5	(88.39)	4.0	(62.50)	4.43	96.73
4.0	(62.50)	4.5	(44.19)	8.29	92.3
4.5	(44.19)	5.0	(31.25)	10.93	84.01
5.0	(31.25)	5.5	(22.10)	11.35	73.07
5.5	(22.10)	6.0	(15.63)	10.2	61.73
6.0	(15.63)	6.5	(11.05)	8.69	51.52
6.5	(11.05)	7.0	(7.81)	7.41	42.83
7.0	(7.81)	7.5	(5.52)	6.45	35.42
7.5	(5.52)	8.0	(3.90)	5.76	28.97

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.31	23.21
8.5	(2.76)	9.0	(1.95)	4.93	17.9
9.0	(1.95)	9.5	(1.38)	4.43	12.97
9.5	(1.38)	10.0	(0.98)	3.66	8.54
10.0	(0.98)	10.5	(0.69)	2.64	4.88
10.5	(0.69)	11.0	(0.49)	1.56	2.24
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 28-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:05:23 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.18

D[4,3] = 40.58um = 4.62phi
D[v,0.05] = 1.03um = 9.93phi
D[v,0.16] = 2.59um = 8.59phi

D[v,0.5] = 15.46um = 6.02phi
D[v,0.84] = 44.11um = 4.5phi
D[v,0.95] = 74.82um = 3.74phi

Kurtosis = 72.21
Skewness = 8.09
Standard Deviation = 143.02 um = 2.81phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

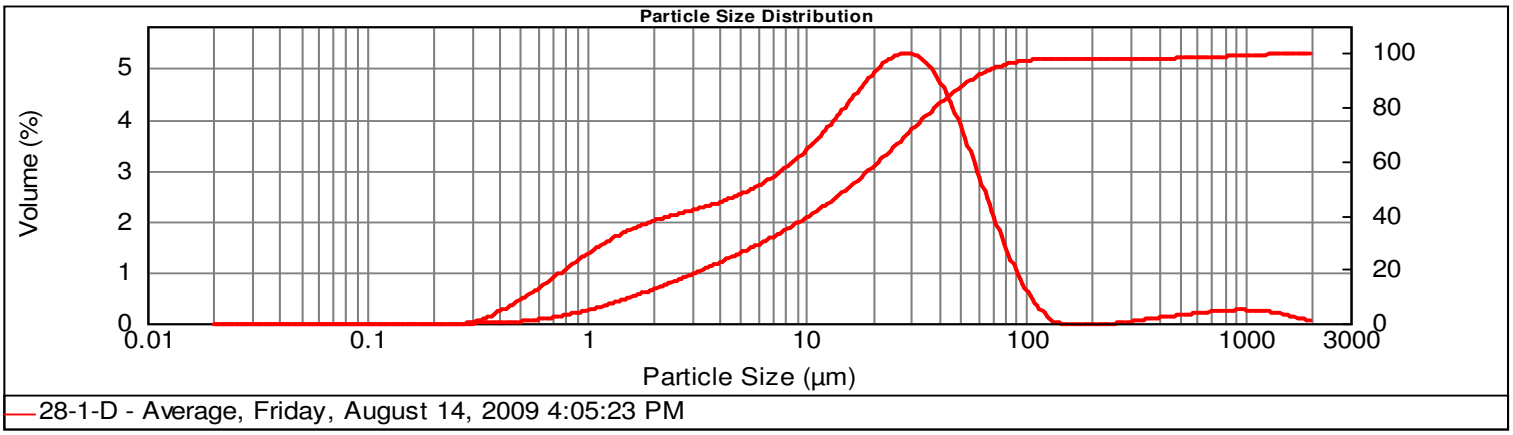
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.51
% Fine Silt (2-3.9 um) = 9.51

d (0.1) : 1.639 **um**
d (0.5) : 15.456 **d (0.9) : 55.722**

Wentworth
% Clay (0-3.9 um) = 22.02
% Silt (3.91-31 um) = 50.56
% Coarse Silt (31 - 62.5 um) = 19.72
% Very Fine sand (62.5 - 125 um) = 5.53

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = 1
% Very Coarse sand (1000 - 2000 um) = .8



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.28	100
-0.5	(1414.21)	0.0	(1000.00)	0.53	99.72
0.0	(1000.00)	0.5	(707.10)	0.57	99.2
0.5	(707.10)	1.0	(500.00)	0.44	98.63
1.0	(500.00)	1.5	(353.55)	0.27	98.19
1.5	(353.55)	2.0	(250.00)	0.07	97.93
2.0	(250.00)	2.5	(176.78)	0	97.86
2.5	(176.78)	3.0	(125.00)	0.03	97.86
3.0	(125.00)	3.5	(88.39)	1.24	97.83
3.5	(88.39)	4.0	(62.50)	4.29	96.59
4.0	(62.50)	4.5	(44.19)	8.24	92.3
4.5	(44.19)	5.0	(31.25)	11.2	84.06
5.0	(31.25)	5.5	(22.10)	11.86	72.86
5.5	(22.10)	6.0	(15.63)	10.69	61
6.0	(15.63)	6.5	(11.05)	8.93	50.31
6.5	(11.05)	7.0	(7.81)	7.42	41.38
7.0	(7.81)	7.5	(5.52)	6.32	33.96
7.5	(5.52)	8.0	(3.90)	5.59	27.63

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.12	22.04
8.5	(2.76)	9.0	(1.95)	4.72	16.93
9.0	(1.95)	9.5	(1.38)	4.21	12.21
9.5	(1.38)	10.0	(0.98)	3.45	7.99
10.0	(0.98)	10.5	(0.69)	2.47	4.54
10.5	(0.69)	11.0	(0.49)	1.45	2.07
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 28-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:09:51 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.20

D[4,3] = 37.92um = 4.72phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.46um = 8.67phi

D[v,0.5] = 14.68um = 6.09phi
D[v,0.84] = 42.74um = 4.55phi
D[v,0.95] = 71.29um = 3.81phi

Kurtosis = 80.01
Skewness = 8.53
Standard Deviation = 136.73 um = 2.87phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

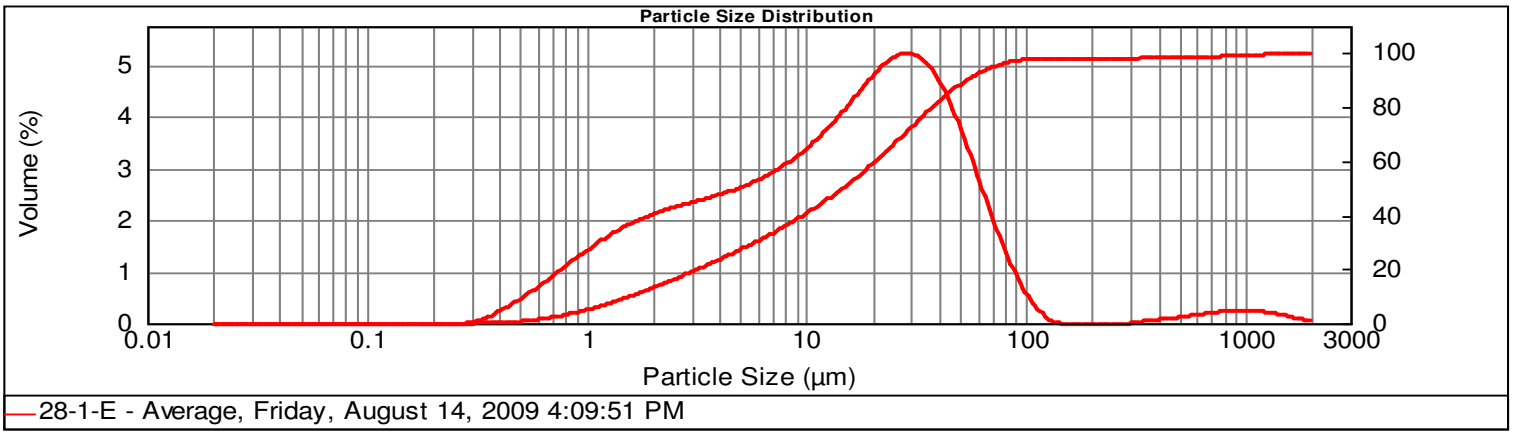
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 13.08
% Fine Silt (2-3.9 um) = 10.05

d (0.1) : 1.586 **um**
d (0.5) : 14.682 **d (0.9) : 53.760**

Wentworth
% Clay (0-3.9 um) = 23.13
% Silt (3.91-31 um) = 50.5
% Coarse Silt (31 - 62.5 um) = 19.38
% Very Fine sand (62.5 - 125 um) = 5.13

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .21
% Coarse sand (500-1000 um) = .88
% Very Coarse sand (1000 - 2000 um) = .75



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.25	100
-0.5	(1414.21)	0.0	(1000.00)	0.5	99.75
0.0	(1000.00)	0.5	(707.10)	0.52	99.25
0.5	(707.10)	1.0	(500.00)	0.36	98.73
1.0	(500.00)	1.5	(353.55)	0.18	98.37
1.5	(353.55)	2.0	(250.00)	0.02	98.18
2.0	(250.00)	2.5	(176.78)	0	98.16
2.5	(176.78)	3.0	(125.00)	0.02	98.16
3.0	(125.00)	3.5	(88.39)	1.08	98.14
3.5	(88.39)	4.0	(62.50)	4.05	97.06
4.0	(62.50)	4.5	(44.19)	8.04	93.01
4.5	(44.19)	5.0	(31.25)	11.07	84.97
5.0	(31.25)	5.5	(22.10)	11.72	73.9
5.5	(22.10)	6.0	(15.63)	10.49	62.19
6.0	(15.63)	6.5	(11.05)	8.78	51.7
6.5	(11.05)	7.0	(7.81)	7.42	42.92
7.0	(7.81)	7.5	(5.52)	6.49	35.49
7.5	(5.52)	8.0	(3.90)	5.85	29

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.41	23.15
8.5	(2.76)	9.0	(1.95)	4.99	17.74
9.0	(1.95)	9.5	(1.38)	4.43	12.75
9.5	(1.38)	10.0	(0.98)	3.61	8.32
10.0	(0.98)	10.5	(0.69)	2.57	4.7
10.5	(0.69)	11.0	(0.49)	1.5	2.13
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 28-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 4:14:22 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.60

D[4,3] = 41.75um = 4.58phi
D[v,0.05] = 1um = 9.96phi
D[v,0.16] = 2.5um = 8.64phi

D[v,0.5] = 15.7um = 5.99phi
D[v,0.84] = 44.95um = 4.48phi
D[v,0.95] = 76.02um = 3.72phi

Kurtosis = 68.43
Skewness = 7.88
Standard Deviation = 146.47 um = 2.77phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

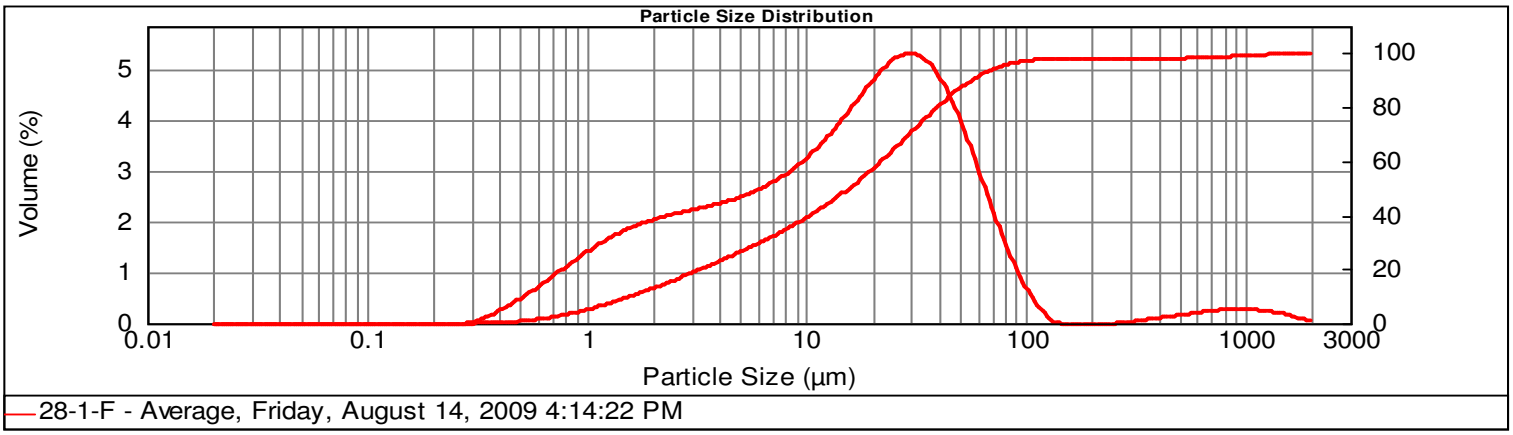
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.95
% Fine Silt (2-3.9 um) = 9.56

d (0.1) : 1.589 **um**
d (0.5) : 15.697 **d (0.9) : 56.676**

Wentworth
% Clay (0-3.9 um) = 22.52
% Silt (3.91-31 um) = 49.32
% Coarse Silt (31 - 62.5 um) = 20.17
% Very Fine sand (62.5 - 125 um) = 5.74

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .31
% Coarse sand (500-1000 um) = 1.06
% Very Coarse sand (1000 - 2000 um) = .85



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.29	100
-0.5	(1414.21)	0.0	(1000.00)	0.56	99.71
0.0	(1000.00)	0.5	(707.10)	0.61	99.15
0.5	(707.10)	1.0	(500.00)	0.46	98.55
1.0	(500.00)	1.5	(353.55)	0.26	98.09
1.5	(353.55)	2.0	(250.00)	0.06	97.83
2.0	(250.00)	2.5	(176.78)	0	97.78
2.5	(176.78)	3.0	(125.00)	0.03	97.78
3.0	(125.00)	3.5	(88.39)	1.29	97.74
3.5	(88.39)	4.0	(62.50)	4.46	96.46
4.0	(62.50)	4.5	(44.19)	8.5	92
4.5	(44.19)	5.0	(31.25)	11.39	83.5
5.0	(31.25)	5.5	(22.10)	11.82	72.11
5.5	(22.10)	6.0	(15.63)	10.41	60.29
6.0	(15.63)	6.5	(11.05)	8.56	49.88
6.5	(11.05)	7.0	(7.81)	7.11	41.31
7.0	(7.81)	7.5	(5.52)	6.14	34.2
7.5	(5.52)	8.0	(3.90)	5.52	28.06
8.0	(3.90)	8.5	(2.76)	5.13	22.54
8.5	(2.76)	9.0	(1.95)	4.78	17.42
9.0	(1.95)	9.5	(1.38)	4.3	12.64
9.5	(1.38)	10.0	(0.98)	3.56	8.33
10.0	(0.98)	10.5	(0.69)	2.58	4.77
10.5	(0.69)	11.0	(0.49)	1.52	2.19
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 29-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 5:12:09 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.44

D[4,3] = 47.97um = 4.38phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.66um = 8.55phi

D[v,0.5] = 14.96um = 6.06phi
D[v,0.84] = 47.78um = 4.39phi
D[v,0.95] = 98.04um = 3.35phi

Kurtosis = 52.99
Skewness = 6.88
Standard Deviation = 158.42 um = 2.66phi

Inclusive SD (Sorting Coeff.) = 2.03 phi (Very Poorly Sorted)
Inclusive Kurtosis = .93 phi (Mesokurtic)

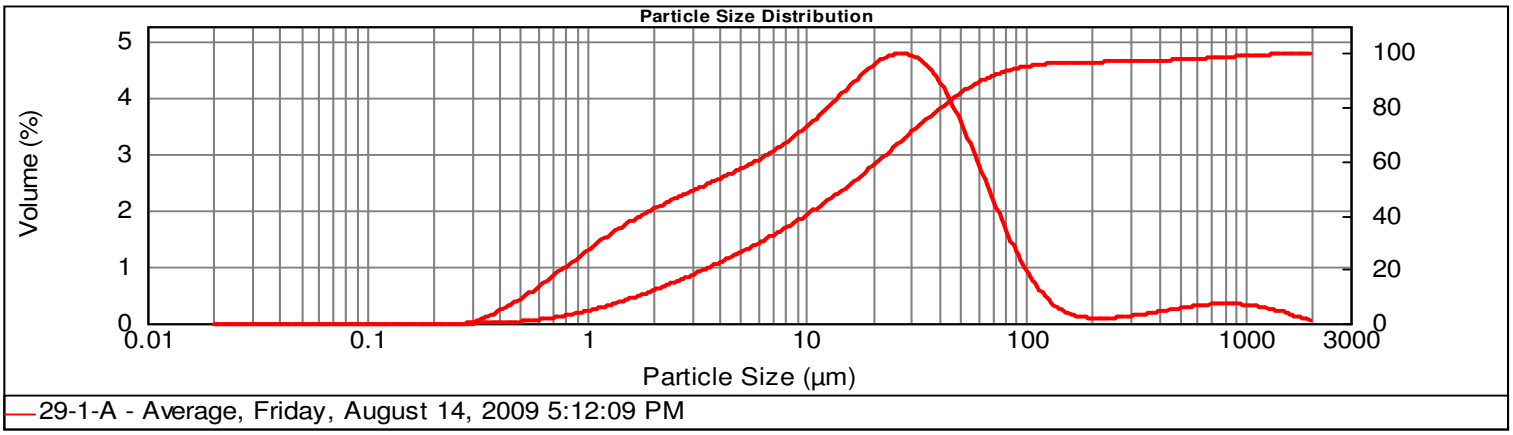
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.33 phi (Silt)

USGS
% Clay (0-2 um) = 12.01
% Fine Silt (2-3.9 um) = 9.93

d (0.1) : 1.706 **um**
d (0.5) : 14.960 **d (0.9) : 63.603**

Wentworth
% Clay (0-3.9 um) = 21.95
% Silt (3.91-31 um) = 49.78
% Coarse Silt (31 - 62.5 um) = 17.96
% Very Fine sand (62.5 - 125 um) = 6.4

% Fine sand (125-250 um) = .73
% Medium sand (250-500 um) = .78
% Coarse sand (500-1000 um) = 1.46
% Very Coarse sand (1000 - 2000 um) = .93



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.3	100
-0.5	(1414.21)	0.0	(1000.00)	0.63	99.7
0.0	(1000.00)	0.5	(707.10)	0.77	99.07
0.5	(707.10)	1.0	(500.00)	0.69	98.3
1.0	(500.00)	1.5	(353.55)	0.49	97.6
1.5	(353.55)	2.0	(250.00)	0.29	97.12
2.0	(250.00)	2.5	(176.78)	0.21	96.83
2.5	(176.78)	3.0	(125.00)	0.52	96.62
3.0	(125.00)	3.5	(88.39)	1.88	96.09
3.5	(88.39)	4.0	(62.50)	4.52	94.21
4.0	(62.50)	4.5	(44.19)	7.68	89.7
4.5	(44.19)	5.0	(31.25)	10.04	82.02
5.0	(31.25)	5.5	(22.10)	10.75	71.98
5.5	(22.10)	6.0	(15.63)	10.06	61.23
6.0	(15.63)	6.5	(11.05)	8.81	51.18
6.5	(11.05)	7.0	(7.81)	7.63	42.37
7.0	(7.81)	7.5	(5.52)	6.73	34.73
7.5	(5.52)	8.0	(3.90)	6.03	28.01

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.44	21.97
8.5	(2.76)	9.0	(1.95)	4.83	16.54
9.0	(1.95)	9.5	(1.38)	4.14	11.71
9.5	(1.38)	10.0	(0.98)	3.29	7.57
10.0	(0.98)	10.5	(0.69)	2.32	4.28
10.5	(0.69)	11.0	(0.49)	1.36	1.95
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 29-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 5:17:34 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.66

D[4,3] = 55.32um = 4.18phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.75um = 8.5phi

D[v,0.5] = 15.58um = 6phi
D[v,0.84] = 48.74um = 4.36phi
D[v,0.95] = 108.31um = 3.21phi

Kurtosis = 40.39
Skewness = 6.08
Standard Deviation = 181.9 um = 2.46phi

Inclusive SD (Sorting Coeff.) = 2.04 phi (Very Poorly Sorted)
Inclusive Kurtosis = .95 phi (Mesokurtic)

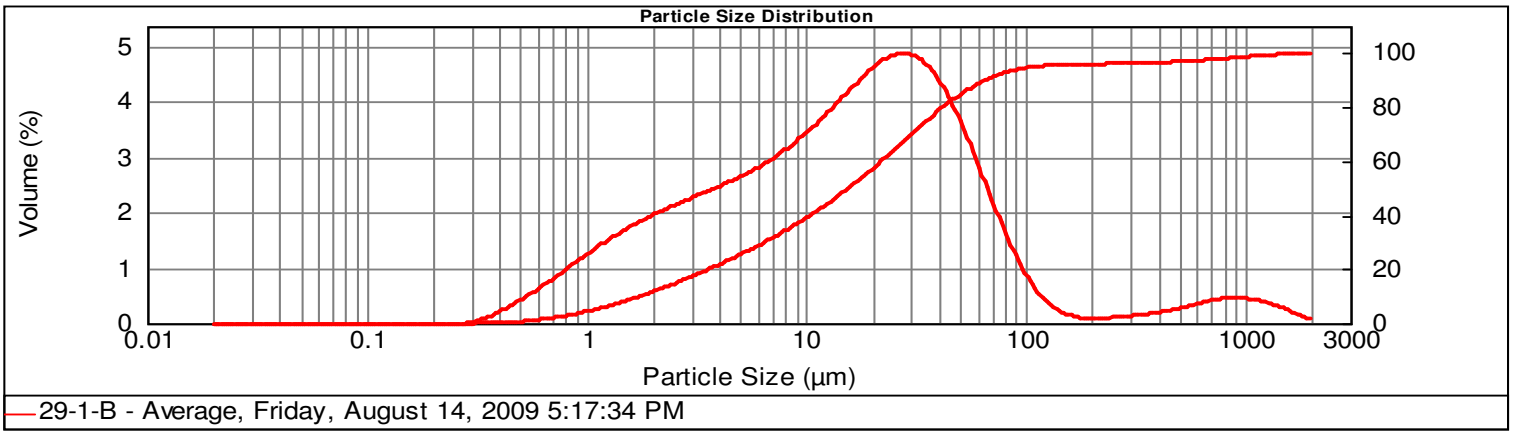
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.29 phi (Silt)

USGS
% Clay (0-2 um) = 11.66
% Fine Silt (2-3.9 um) = 9.62

d (0.1) : 1.749 **um**
d (0.5) : 15.583 **d (0.9) : 65.165**

Wentworth
% Clay (0-3.9 um) = 21.28
% Silt (3.91-31 um) = 49.64
% Coarse Silt (31 - 62.5 um) = 18.36
% Very Fine sand (62.5 - 125 um) = 6.19

% Fine sand (125-250 um) = .65
% Medium sand (250-500 um) = .78
% Coarse sand (500-1000 um) = 1.8
% Very Coarse sand (1000 - 2000 um) = 1.3



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.42	100
-0.5	(1414.21)	0.0	(1000.00)	0.88	99.58
0.0	(1000.00)	0.5	(707.10)	1.02	98.7
0.5	(707.10)	1.0	(500.00)	0.79	97.69
1.0	(500.00)	1.5	(353.55)	0.47	96.9
1.5	(353.55)	2.0	(250.00)	0.31	96.43
2.0	(250.00)	2.5	(176.78)	0.2	96.12
2.5	(176.78)	3.0	(125.00)	0.45	95.93
3.0	(125.00)	3.5	(88.39)	1.74	95.48
3.5	(88.39)	4.0	(62.50)	4.46	93.74
4.0	(62.50)	4.5	(44.19)	7.81	89.28
4.5	(44.19)	5.0	(31.25)	10.29	81.47
5.0	(31.25)	5.5	(22.10)	10.96	71.18
5.5	(22.10)	6.0	(15.63)	10.15	60.22
6.0	(15.63)	6.5	(11.05)	8.8	50.07
6.5	(11.05)	7.0	(7.81)	7.54	41.27
7.0	(7.81)	7.5	(5.52)	6.57	33.73
7.5	(5.52)	8.0	(3.90)	5.85	27.16

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.27	21.31
8.5	(2.76)	9.0	(1.95)	4.68	16.04
9.0	(1.95)	9.5	(1.38)	4.02	11.36
9.5	(1.38)	10.0	(0.98)	3.2	7.34
10.0	(0.98)	10.5	(0.69)	2.25	4.14
10.5	(0.69)	11.0	(0.49)	1.31	1.88
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 29-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 5:30:52 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.96

D[4,3] = 42.42um = 4.56phi
D[v,0.05] = 1.1um = 9.82phi
D[v,0.16] = 2.91um = 8.42phi

D[v,0.5] = 16.9um = 5.89phi
D[v,0.84] = 49.54um = 4.34phi
D[v,0.95] = 98.76um = 3.34phi

Kurtosis = 60
Skewness = 7.08
Standard Deviation = 118.7 um = 3.07phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .95 phi (Mesokurtic)

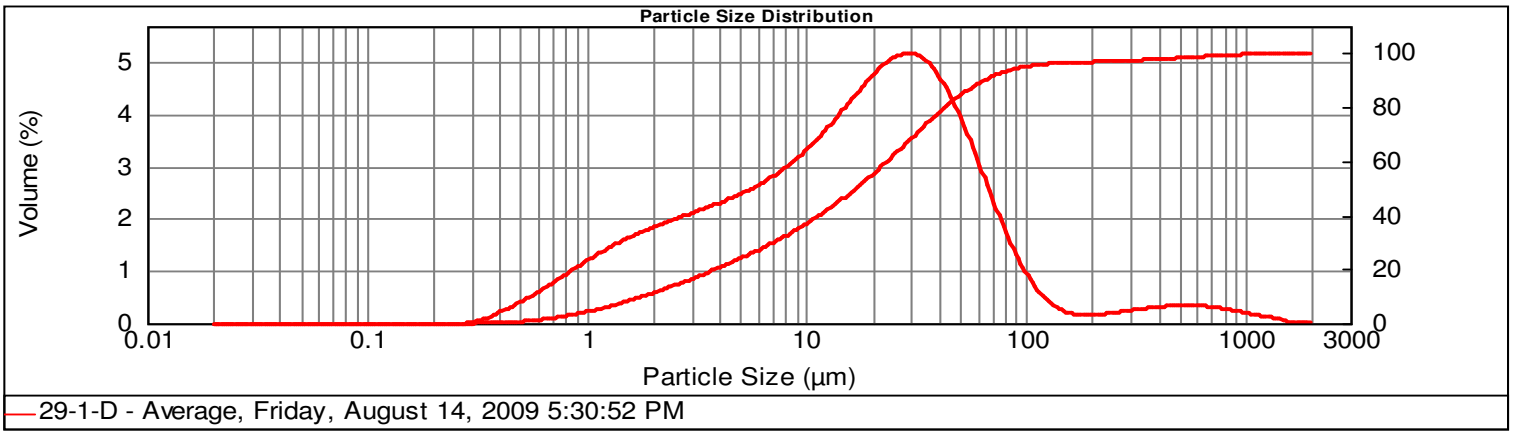
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.21 phi (Silt)

USGS
% Clay (0-2 um) = 11.17
% Fine Silt (2-3.9 um) = 8.99

d (0.1) : 1.811 **um**
d (0.5) : 16.898 **d (0.9) : 64.869**

Wentworth
% Clay (0-3.9 um) = 20.15
% Silt (3.91-31 um) = 49.33
% Coarse Silt (31 - 62.5 um) = 19.82
% Very Fine sand (62.5 - 125 um) = 6.75

% Fine sand (125-250 um) = .95
% Medium sand (250-500 um) = 1.27
% Coarse sand (500-1000 um) = 1.35
% Very Coarse sand (1000 - 2000 um) = .38



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.32	99.94
0.0	(1000.00)	0.5	(707.10)	0.59	99.62
0.5	(707.10)	1.0	(500.00)	0.76	99.03
1.0	(500.00)	1.5	(353.55)	0.72	98.27
1.5	(353.55)	2.0	(250.00)	0.55	97.55
2.0	(250.00)	2.5	(176.78)	0.38	97
2.5	(176.78)	3.0	(125.00)	0.57	96.62
3.0	(125.00)	3.5	(88.39)	1.91	96.05
3.5	(88.39)	4.0	(62.50)	4.84	94.14
4.0	(62.50)	4.5	(44.19)	8.47	89.3
4.5	(44.19)	5.0	(31.25)	11.08	80.83
5.0	(31.25)	5.5	(22.10)	11.57	69.76
5.5	(22.10)	6.0	(15.63)	10.39	58.19
6.0	(15.63)	6.5	(11.05)	8.71	47.8
6.5	(11.05)	7.0	(7.81)	7.25	39.09
7.0	(7.81)	7.5	(5.52)	6.2	31.83
7.5	(5.52)	8.0	(3.90)	5.46	25.64

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.9	20.18
8.5	(2.76)	9.0	(1.95)	4.39	15.27
9.0	(1.95)	9.5	(1.38)	3.81	10.88
9.5	(1.38)	10.0	(0.98)	3.07	7.08
10.0	(0.98)	10.5	(0.69)	2.18	4.01
10.5	(0.69)	11.0	(0.49)	1.28	1.83
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 29-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 5:35:58 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.45

D[4,3] = 38.37um = 4.7phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 15.25um = 6.04phi
D[v,0.84] = 44.38um = 4.49phi
D[v,0.95] = 75.79um = 3.72phi

Kurtosis = 81.26
Skewness = 8.46
Standard Deviation = 129.39 um = 2.95phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Mesokurtic)

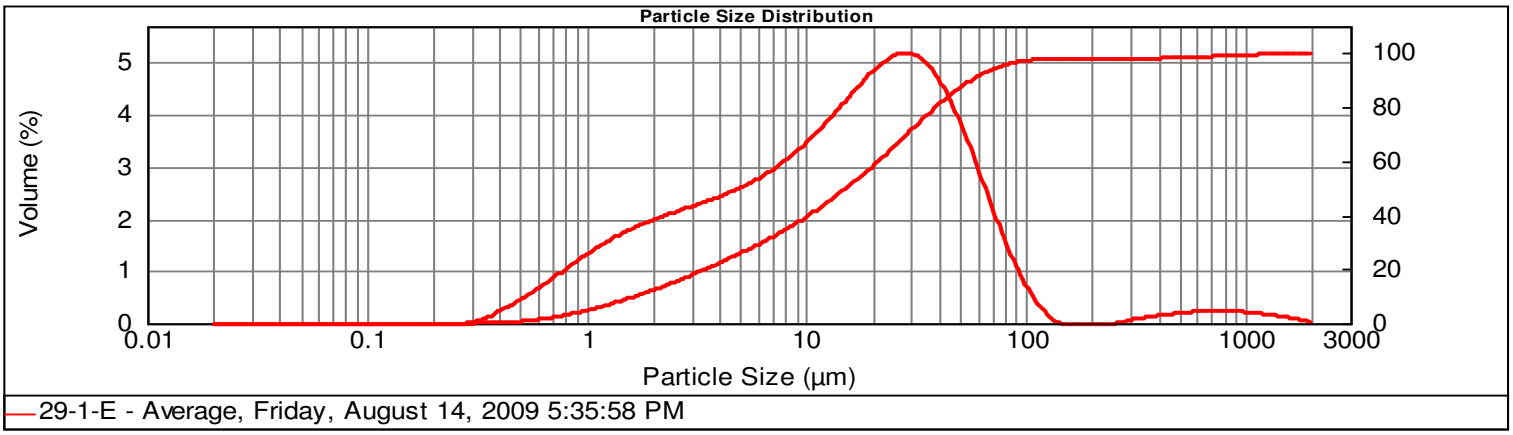
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.27
% Fine Silt (2-3.9 um) = 9.57

d (0.1) : 1.668 **um**
d (0.5) : 15.245 **d (0.9) : 56.303**

Wentworth
% Clay (0-3.9 um) = 21.84
% Silt (3.91-31 um) = 50.8
% Coarse Silt (31 - 62.5 um) = 19.44
% Very Fine sand (62.5 - 125 um) = 5.78

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .48
% Coarse sand (500-1000 um) = 1.01
% Very Coarse sand (1000 - 2000 um) = .6



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.19	100
-0.5	(1414.21)	0.0	(1000.00)	0.41	99.81
0.0	(1000.00)	0.5	(707.10)	0.52	99.4
0.5	(707.10)	1.0	(500.00)	0.49	98.88
1.0	(500.00)	1.5	(353.55)	0.36	98.38
1.5	(353.55)	2.0	(250.00)	0.13	98.03
2.0	(250.00)	2.5	(176.78)	0	97.9
2.5	(176.78)	3.0	(125.00)	0.04	97.9
3.0	(125.00)	3.5	(88.39)	1.36	97.86
3.5	(88.39)	4.0	(62.50)	4.41	96.5
4.0	(62.50)	4.5	(44.19)	8.21	92.09
4.5	(44.19)	5.0	(31.25)	10.97	83.88
5.0	(31.25)	5.5	(22.10)	11.62	72.91
5.5	(22.10)	6.0	(15.63)	10.6	61.29
6.0	(15.63)	6.5	(11.05)	9.01	50.69
6.5	(11.05)	7.0	(7.81)	7.57	41.68
7.0	(7.81)	7.5	(5.52)	6.5	34.11
7.5	(5.52)	8.0	(3.90)	5.75	27.61

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.2	21.87
8.5	(2.76)	9.0	(1.95)	4.7	16.67
9.0	(1.95)	9.5	(1.38)	4.14	11.97
9.5	(1.38)	10.0	(0.98)	3.38	7.83
10.0	(0.98)	10.5	(0.69)	2.42	4.45
10.5	(0.69)	11.0	(0.49)	1.42	2.04
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 29-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 5:40:41 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.97

D[4,3] = 40.25um = 4.63phi
D[v,0.05] = 1.02um = 9.93phi
D[v,0.16] = 2.58um = 8.6phi

D[v,0.5] = 16.14um = 5.95phi
D[v,0.84] = 50.44um = 4.31phi
D[v,0.95] = 86.56um = 3.53phi

Kurtosis = 83.63
Skewness = 8.56
Standard Deviation = 128.8 um = 2.96phi

Inclusive SD (Sorting Coeff.) = 2.04 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

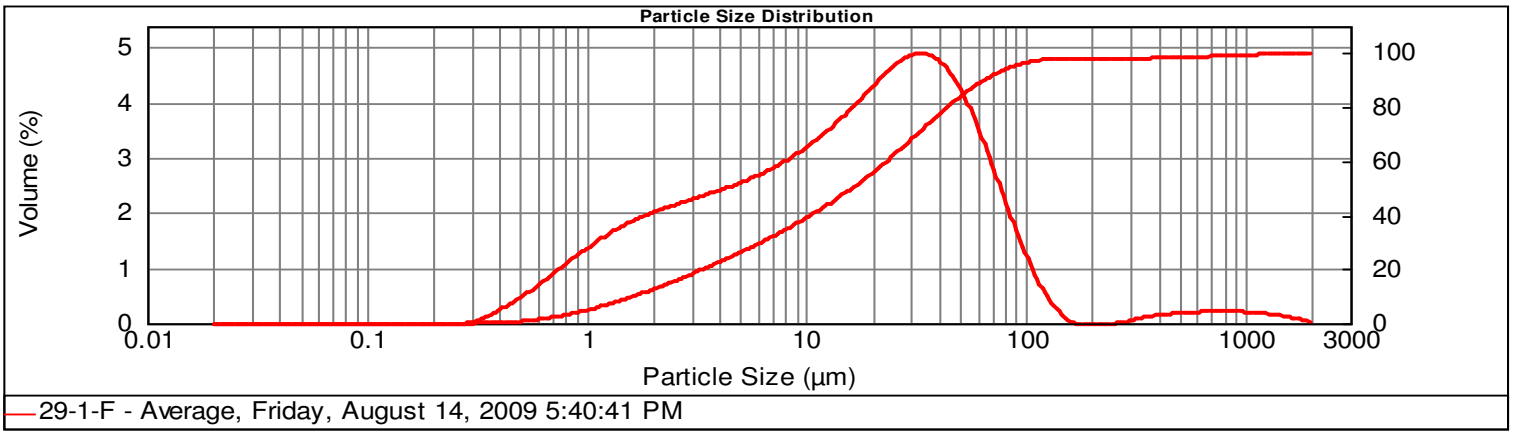
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.29 phi (Silt)

USGS
% Clay (0-2 um) = 12.55
% Fine Silt (2-3.9 um) = 9.61

d (0.1) : 1.634 **um**
d (0.5) : 16.137 **d (0.9) : 64.288**

Wentworth
% Clay (0-3.9 um) = 22.16
% Silt (3.91-31 um) = 46.85
% Coarse Silt (31 - 62.5 um) = 20.38
% Very Fine sand (62.5 - 125 um) = 8.28

% Fine sand (125-250 um) = .35
% Medium sand (250-500 um) = .46
% Coarse sand (500-1000 um) = .93
% Very Coarse sand (1000 - 2000 um) = .61



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.2	100
-0.5	(1414.21)	0.0	(1000.00)	0.41	99.8
0.0	(1000.00)	0.5	(707.10)	0.48	99.39
0.5	(707.10)	1.0	(500.00)	0.45	98.92
1.0	(500.00)	1.5	(353.55)	0.35	98.46
1.5	(353.55)	2.0	(250.00)	0.11	98.11
2.0	(250.00)	2.5	(176.78)	0	98.01
2.5	(176.78)	3.0	(125.00)	0.35	98.01
3.0	(125.00)	3.5	(88.39)	2.41	97.66
3.5	(88.39)	4.0	(62.50)	5.86	95.25
4.0	(62.50)	4.5	(44.19)	9.21	89.38
4.5	(44.19)	5.0	(31.25)	10.91	80.17
5.0	(31.25)	5.5	(22.10)	10.67	69.26
5.5	(22.10)	6.0	(15.63)	9.41	58.59
6.0	(15.63)	6.5	(11.05)	8.08	49.18
6.5	(11.05)	7.0	(7.81)	7.03	41.1
7.0	(7.81)	7.5	(5.52)	6.24	34.08
7.5	(5.52)	8.0	(3.90)	5.65	27.84

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.19	22.18
8.5	(2.76)	9.0	(1.95)	4.75	16.99
9.0	(1.95)	9.5	(1.38)	4.21	12.24
9.5	(1.38)	10.0	(0.98)	3.45	8.04
10.0	(0.98)	10.5	(0.69)	2.48	4.59
10.5	(0.69)	11.0	(0.49)	1.46	2.11
11.0	(0.49)	11.5	(0.35)	0.59	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 30-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:00:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 24.78

D[4,3] = 39.22um = 4.67phi
D[v,0.05] = 1.65um = 9.24phi
D[v,0.16] = 4.88um = 7.68phi

D[v,0.5] = 16.96um = 5.88phi
D[v,0.84] = 54.07um = 4.21phi
D[v,0.95] = 106.5um = 3.23phi

Kurtosis = 111.1
Skewness = 9.6
Standard Deviation = 108.25 um = 3.21phi

Inclusive SD (Sorting Coeff.) = 1.78 phi (Poorly Sorted)
Inclusive Kurtosis = 1.05 phi (Mesokurtic)

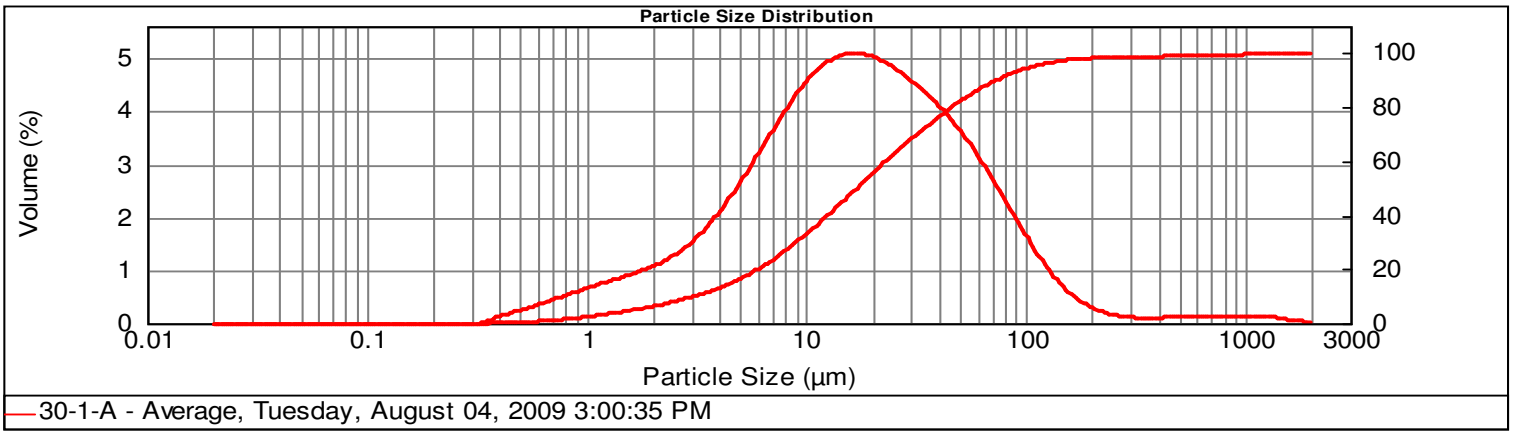
Inclusive Skewness = -0.08 (Near Symmetrical)
Inclusive Mean = 5.92 phi (Silt)

USGS
% Clay (0-2 um) = 6.26
% Fine Silt (2-3.9 um) = 6.39

d (0.1) : 3.111 **um**
d (0.5) : 16.956 **d (0.9) : 73.101**

Wentworth
% Clay (0-3.9 um) = 12.65
% Silt (3.91-31 um) = 56.64
% Coarse Silt (31 - 62.5 um) = 17.81
% Very Fine sand (62.5 - 125 um) = 9.22

% Fine sand (125-250 um) = 2.17
% Medium sand (250-500 um) = .51
% Coarse sand (500-1000 um) = .6
% Very Coarse sand (1000 - 2000 um) = .42



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.13	100
-0.5	(1414.21)	0.0	(1000.00)	0.29	99.87
0.0	(1000.00)	0.5	(707.10)	0.31	99.58
0.5	(707.10)	1.0	(500.00)	0.29	99.27
1.0	(500.00)	1.5	(353.55)	0.24	98.99
1.5	(353.55)	2.0	(250.00)	0.27	98.75
2.0	(250.00)	2.5	(176.78)	0.59	98.48
2.5	(176.78)	3.0	(125.00)	1.58	97.89
3.0	(125.00)	3.5	(88.39)	3.43	96.31
3.5	(88.39)	4.0	(62.50)	5.79	92.88
4.0	(62.50)	4.5	(44.19)	7.96	87.09
4.5	(44.19)	5.0	(31.25)	9.61	79.13
5.0	(31.25)	5.5	(22.10)	10.79	69.52
5.5	(22.10)	6.0	(15.63)	11.46	58.74
6.0	(15.63)	6.5	(11.05)	11.27	47.27
6.5	(11.05)	7.0	(7.81)	9.94	36.01
7.0	(7.81)	7.5	(5.52)	7.81	26.07
7.5	(5.52)	8.0	(3.90)	5.58	18.25
8.0	(3.90)	8.5	(2.76)	3.83	12.67
8.5	(2.76)	9.0	(1.95)	2.75	8.84
9.0	(1.95)	9.5	(1.38)	2.13	6.09
9.5	(1.38)	10.0	(0.98)	1.68	3.96
10.0	(0.98)	10.5	(0.69)	1.22	2.28
10.5	(0.69)	11.0	(0.49)	0.75	1.05
11.0	(0.49)	11.5	(0.35)	0.31	0.31
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 30-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:04:54 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.36

D[4,3] = 36.56um = 4.77phi
D[v,0.05] = 1.7um = 9.2phi
D[v,0.16] = 4.83um = 7.69phi

D[v,0.5] = 16.91um = 5.89phi
D[v,0.84] = 55.89um = 4.16phi
D[v,0.95] = 106.51um = 3.23phi

Kurtosis = 111.42
Skewness = 9.42
Standard Deviation = 85.58 um = 3.55phi

Inclusive SD (Sorting Coeff.) = 1.79 phi (Poorly Sorted)
Inclusive Kurtosis = 1.01 phi (Mesokurtic)

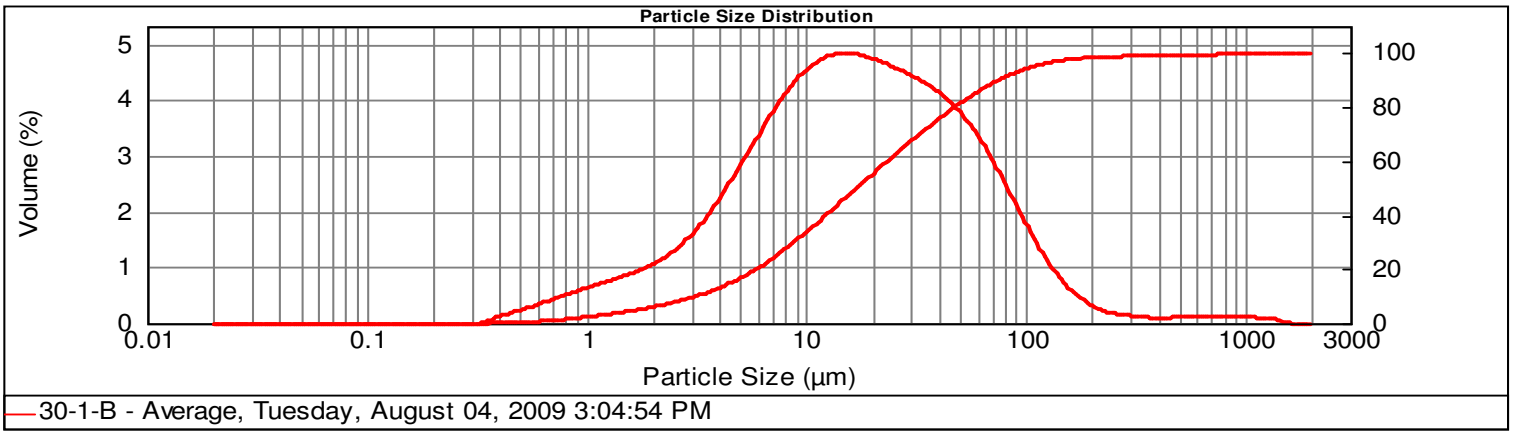
Inclusive Skewness = -0.07 (Near Symmetrical)
Inclusive Mean = 5.91 phi (Silt)

USGS
% Clay (0-2 um) = 6.04
% Fine Silt (2-3.9 um) = 6.57

d (0.1) : 3.161 **um**
d (0.5) : 16.908 **d (0.9) : 74.723**

Wentworth
% Clay (0-3.9 um) = 12.61
% Silt (3.91-31 um) = 55.77
% Coarse Silt (31 - 62.5 um) = 18.11
% Very Fine sand (62.5 - 125 um) = 9.92

% Fine sand (125-250 um) = 2.33
% Medium sand (250-500 um) = .53
% Coarse sand (500-1000 um) = .5
% Very Coarse sand (1000 - 2000 um) = .23



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.02	100
-0.5	(1414.21)	0.0	(1000.00)	0.22	99.98
0.0	(1000.00)	0.5	(707.10)	0.25	99.77
0.5	(707.10)	1.0	(500.00)	0.25	99.52
1.0	(500.00)	1.5	(353.55)	0.22	99.27
1.5	(353.55)	2.0	(250.00)	0.31	99.05
2.0	(250.00)	2.5	(176.78)	0.64	98.74
2.5	(176.78)	3.0	(125.00)	1.69	98.1
3.0	(125.00)	3.5	(88.39)	3.71	96.41
3.5	(88.39)	4.0	(62.50)	6.21	92.7
4.0	(62.50)	4.5	(44.19)	8.31	86.49
4.5	(44.19)	5.0	(31.25)	9.57	78.18
5.0	(31.25)	5.5	(22.10)	10.3	68.61
5.5	(22.10)	6.0	(15.63)	10.81	58.32
6.0	(15.63)	6.5	(11.05)	10.85	47.51
6.5	(11.05)	7.0	(7.81)	9.97	36.66
7.0	(7.81)	7.5	(5.52)	8.14	26.69
7.5	(5.52)	8.0	(3.90)	5.92	18.55
8.0	(3.90)	8.5	(2.76)	4	12.63
8.5	(2.76)	9.0	(1.95)	2.75	8.63
9.0	(1.95)	9.5	(1.38)	2.07	5.88
9.5	(1.38)	10.0	(0.98)	1.62	3.81
10.0	(0.98)	10.5	(0.69)	1.18	2.19
10.5	(0.69)	11.0	(0.49)	0.72	1.01
11.0	(0.49)	11.5	(0.35)	0.29	0.29
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 30-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:10:36 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 28.50

D[4,3] = 44.22um = 4.5phi
D[v,0.05] = 1.75um = 9.15phi
D[v,0.16] = 4.72um = 7.73phi

D[v,0.5] = 16.02um = 5.96phi
D[v,0.84] = 56um = 4.16phi
D[v,0.95] = 116.16um = 3.11phi

Kurtosis = 75.07
Skewness = 7.9
Standard Deviation = 125.49 um = 2.99phi

Inclusive SD (Sorting Coeff.) = 1.81 phi (Poorly Sorted)
Inclusive Kurtosis = 1.01 phi (Mesokurtic)

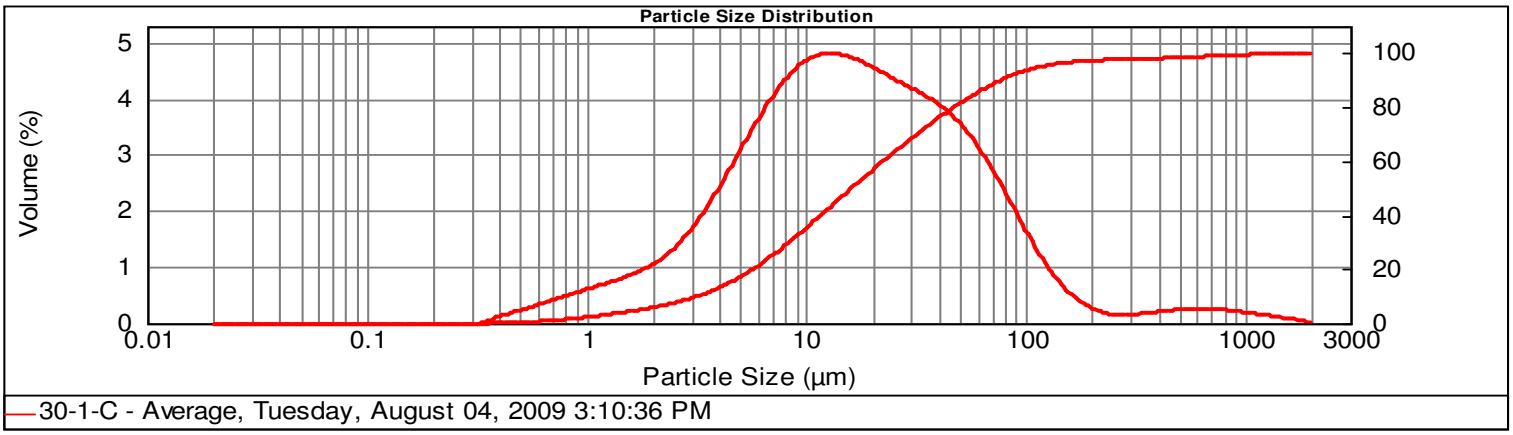
Inclusive Skewness = -0.02 (Near Symmetrical)
Inclusive Mean = 5.95 phi (Silt)

USGS
% Clay (0-2 um) = 5.84
% Fine Silt (2-3.9 um) = 6.91

d (0.1) : 3.178 um
d (0.5) : 16.022
d (0.9) : 76.600

Wentworth
% Clay (0-3.9 um) = 12.75
% Silt (3.91-31 um) = 56.48
% Coarse Silt (31 - 62.5 um) = 17.06
% Very Fine sand (62.5 - 125 um) = 9.24

% Fine sand (125-250 um) = 2.04
% Medium sand (250-500 um) = .83
% Coarse sand (500-1000 um) = 1.1
% Very Coarse sand (1000 - 2000 um) = .5



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.15	100
-0.5	(1414.21)	0.0	(1000.00)	0.35	99.85
0.0	(1000.00)	0.5	(707.10)	0.51	99.5
0.5	(707.10)	1.0	(500.00)	0.58	98.99
1.0	(500.00)	1.5	(353.55)	0.48	98.4
1.5	(353.55)	2.0	(250.00)	0.35	97.92
2.0	(250.00)	2.5	(176.78)	0.55	97.57
2.5	(176.78)	3.0	(125.00)	1.49	97.03
3.0	(125.00)	3.5	(88.39)	3.42	95.53
3.5	(88.39)	4.0	(62.50)	5.82	92.12
4.0	(62.50)	4.5	(44.19)	7.82	86.3
4.5	(44.19)	5.0	(31.25)	9.02	78.48
5.0	(31.25)	5.5	(22.10)	9.77	69.46
5.5	(22.10)	6.0	(15.63)	10.46	59.69
6.0	(15.63)	6.5	(11.05)	10.86	49.22
6.5	(11.05)	7.0	(7.81)	10.37	38.36
7.0	(7.81)	7.5	(5.52)	8.75	27.99
7.5	(5.52)	8.0	(3.90)	6.46	19.24

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.29	12.78
8.5	(2.76)	9.0	(1.95)	2.8	8.49
9.0	(1.95)	9.5	(1.38)	2.01	5.68
9.5	(1.38)	10.0	(0.98)	1.55	3.68
10.0	(0.98)	10.5	(0.69)	1.13	2.13
10.5	(0.69)	11.0	(0.49)	0.71	1
11.0	(0.49)	11.5	(0.35)	0.29	0.29
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 30-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:15:06 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 27.81

D[4,3] = 35.79um = 4.8phi
D[v,0.05] = 1.65um = 9.24phi
D[v,0.16] = 4.44um = 7.82phi

D[v,0.5] = 14.66um = 6.09phi
D[v,0.84] = 49.69um = 4.33phi
D[v,0.95] = 98.31um = 3.35phi

Kurtosis = 124.33
Skewness = 10.2
Standard Deviation = 104.48 um = 3.26phi

Inclusive SD (Sorting Coeff.) = 1.76 phi (Poorly Sorted)
Inclusive Kurtosis = 1.01 phi (Mesokurtic)

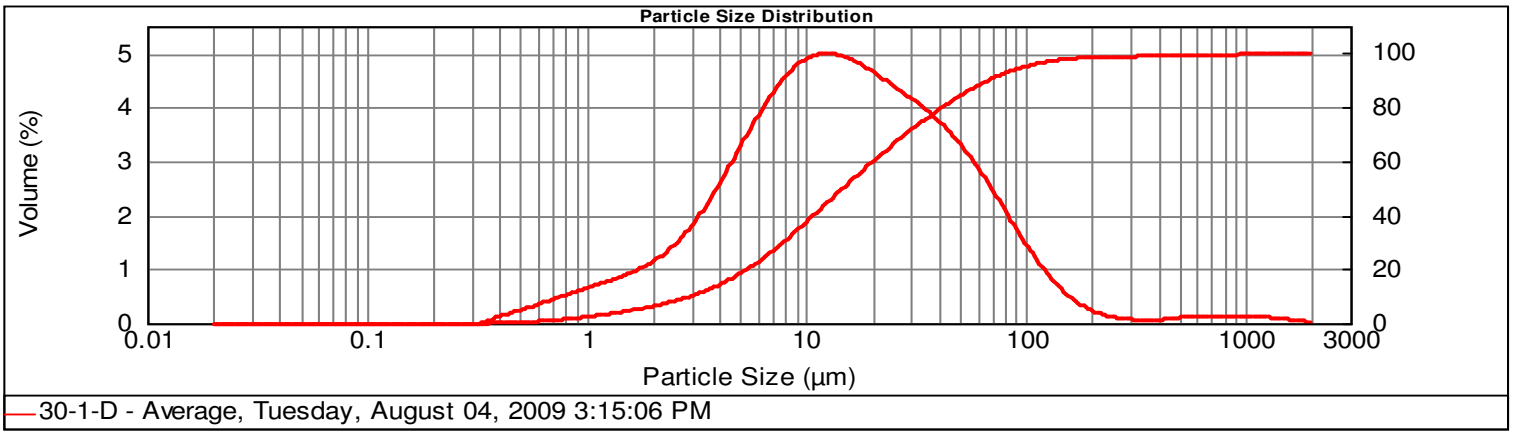
Inclusive Skewness = -0.03 (Near Symmetrical)
Inclusive Mean = 6.08 phi (Silt)

USGS
% Clay (0-2 um) = 6.3
% Fine Silt (2-3.9 um) = 7.43

d (0.1) : 2.980 um
d (0.5) : 14.664
d (0.9) : 67.658

Wentworth
% Clay (0-3.9 um) = 13.72
% Silt (3.91-31 um) = 58.66
% Coarse Silt (31 - 62.5 um) = 16.22
% Very Fine sand (62.5 - 125 um) = 8.29

% Fine sand (125-250 um) = 1.83
% Medium sand (250-500 um) = .32
% Coarse sand (500-1000 um) = .57
% Very Coarse sand (1000 - 2000 um) = .38



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.13	100
-0.5	(1414.21)	0.0	(1000.00)	0.26	99.87
0.0	(1000.00)	0.5	(707.10)	0.3	99.62
0.5	(707.10)	1.0	(500.00)	0.27	99.32
1.0	(500.00)	1.5	(353.55)	0.16	99.05
1.5	(353.55)	2.0	(250.00)	0.17	98.89
2.0	(250.00)	2.5	(176.78)	0.47	98.73
2.5	(176.78)	3.0	(125.00)	1.36	98.26
3.0	(125.00)	3.5	(88.39)	3.06	96.9
3.5	(88.39)	4.0	(62.50)	5.23	93.84
4.0	(62.50)	4.5	(44.19)	7.26	88.61
4.5	(44.19)	5.0	(31.25)	8.75	81.35
5.0	(31.25)	5.5	(22.10)	9.82	72.6
5.5	(22.10)	6.0	(15.63)	10.74	62.79
6.0	(15.63)	6.5	(11.05)	11.29	52.05
6.5	(11.05)	7.0	(7.81)	10.88	40.75
7.0	(7.81)	7.5	(5.52)	9.25	29.88
7.5	(5.52)	8.0	(3.90)	6.87	20.62

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	4.6	13.75
8.5	(2.76)	9.0	(1.95)	3.03	9.15
9.0	(1.95)	9.5	(1.38)	2.18	6.12
9.5	(1.38)	10.0	(0.98)	1.67	3.94
10.0	(0.98)	10.5	(0.69)	1.22	2.27
10.5	(0.69)	11.0	(0.49)	0.75	1.05
11.0	(0.49)	11.5	(0.35)	0.3	0.3
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 30-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:19:37 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.59

D[4,3] = 49.91um = 4.32phi
D[v,0.05] = 1.01um = 9.95phi
D[v,0.16] = 2.52um = 8.64phi

D[v,0.5] = 14.87um = 6.07phi
D[v,0.84] = 44.49um = 4.49phi
D[v,0.95] = 79.62um = 3.65phi

Kurtosis = 44.96
Skewness = 6.52
Standard Deviation = 179.84 um = 2.48phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

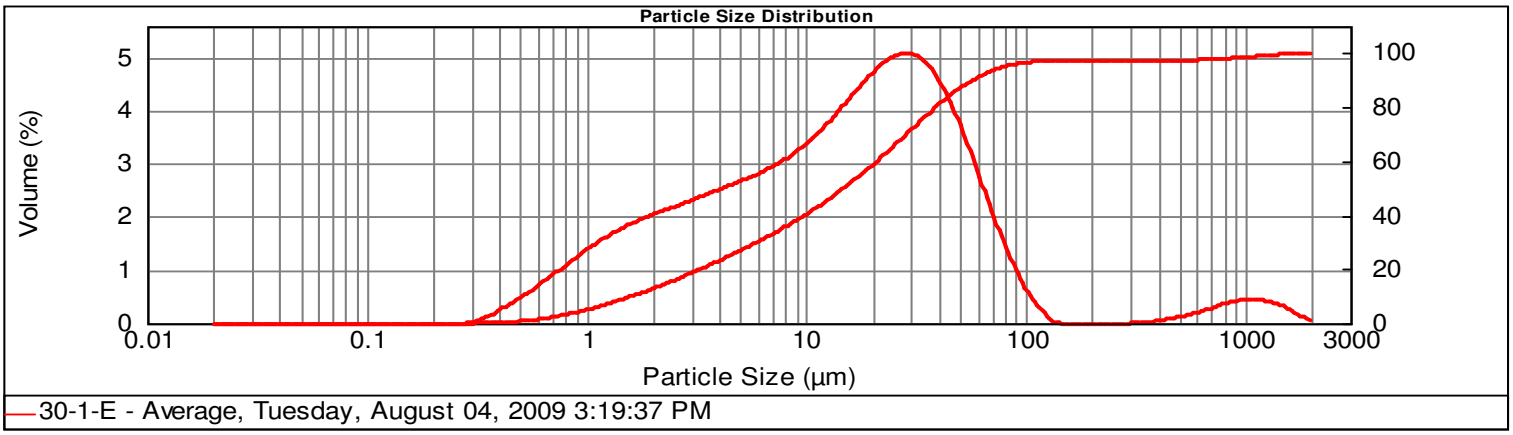
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.4 phi (Silt)

USGS
% Clay (0-2 um) = 12.83
% Fine Silt (2-3.9 um) = 9.87

d (0.1) : 1.604 **um**
d (0.5) : 14.867 **d (0.9) : 57.026**

Wentworth
% Clay (0-3.9 um) = 22.7
% Silt (3.91-31 um) = 50.11
% Coarse Silt (31 - 62.5 um) = 18.91
% Very Fine sand (62.5 - 125 um) = 5.36

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .15
% Coarse sand (500-1000 um) = 1.32
% Very Coarse sand (1000 - 2000 um) = 1.41



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.45	100
-0.5	(1414.21)	0.0	(1000.00)	0.96	99.55
0.0	(1000.00)	0.5	(707.10)	0.87	98.59
0.5	(707.10)	1.0	(500.00)	0.45	97.72
1.0	(500.00)	1.5	(353.55)	0.14	97.27
1.5	(353.55)	2.0	(250.00)	0	97.12
2.0	(250.00)	2.5	(176.78)	0	97.12
2.5	(176.78)	3.0	(125.00)	0.03	97.12
3.0	(125.00)	3.5	(88.39)	1.21	97.09
3.5	(88.39)	4.0	(62.50)	4.14	95.87
4.0	(62.50)	4.5	(44.19)	7.92	91.73
4.5	(44.19)	5.0	(31.25)	10.73	83.81
5.0	(31.25)	5.5	(22.10)	11.39	73.08
5.5	(22.10)	6.0	(15.63)	10.34	61.69
6.0	(15.63)	6.5	(11.05)	8.74	51.35
6.5	(11.05)	7.0	(7.81)	7.42	42.61
7.0	(7.81)	7.5	(5.52)	6.54	35.19
7.5	(5.52)	8.0	(3.90)	5.92	28.65

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.37	22.73
8.5	(2.76)	9.0	(1.95)	4.85	17.36
9.0	(1.95)	9.5	(1.38)	4.28	12.51
9.5	(1.38)	10.0	(0.98)	3.52	8.23
10.0	(0.98)	10.5	(0.69)	2.54	4.71
10.5	(0.69)	11.0	(0.49)	1.5	2.16
11.0	(0.49)	11.5	(0.35)	0.6	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 30-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Tuesday, August 04, 2009 3:24:33 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.67

D[4,3] = 161.79um = 2.63phi
D[v,0.05] = 1.1um = 9.83phi
D[v,0.16] = 3.02um = 8.37phi

D[v,0.5] = 19.92um = 5.65phi
D[v,0.84] = 102.21um = 3.29phi
D[v,0.95] = 1060.32um =-0.08phi

Kurtosis = 5.63
Skewness = 2.54
Standard Deviation = 356.94 um = 1.49phi

Inclusive SD (Sorting Coeff.) = 2.77 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.29 phi (Leptokurtic)

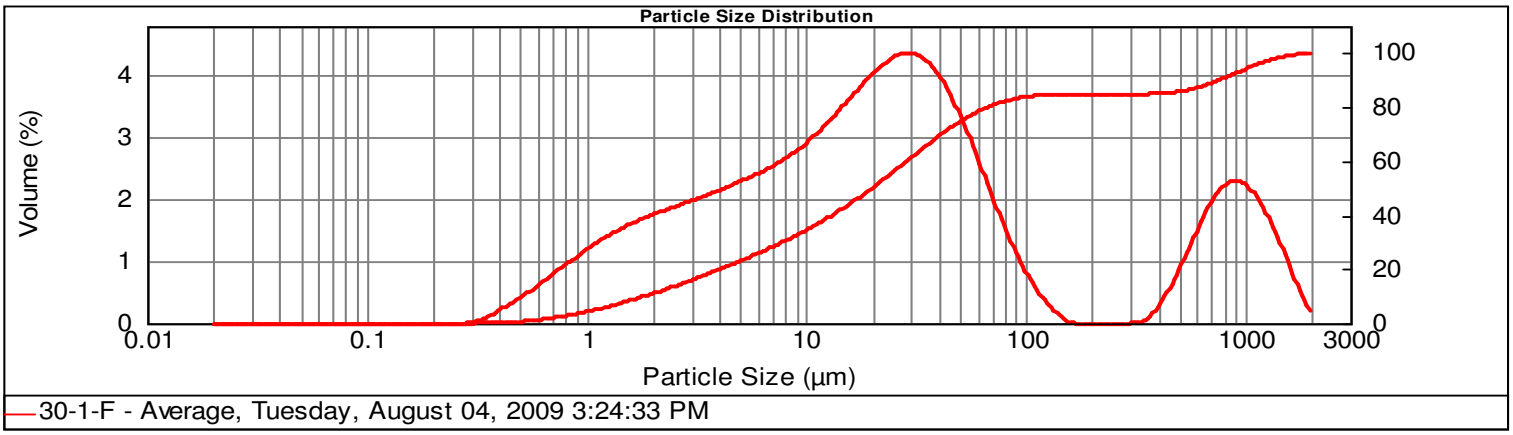
Inclusive Skewness = .04 (Near Symmetrical)
Inclusive Mean = 5.77 phi (Silt)

USGS
% Clay (0-2 um) = 10.99
% Fine Silt (2-3.9 um) = 8.42

d (0.1) : 1.832 **um**
d (0.5) : 19.921 **d (0.9) : 754.199**

Wentworth
% Clay (0-3.9 um) = 19.41
% Silt (3.91-31 um) = 42.85
% Coarse Silt (31 - 62.5 um) = 16.68
% Very Fine sand (62.5 - 125 um) = 5.75

% Fine sand (125-250 um) = .22
% Medium sand (250-500 um) = .92
% Coarse sand (500-1000 um) = 8.33
% Very Coarse sand (1000 - 2000 um) = 5.84



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	1.63	100
-0.5	(1414.21)	0.0	(1000.00)	4.21	98.37
0.0	(1000.00)	0.5	(707.10)	5.03	94.16
0.5	(707.10)	1.0	(500.00)	3.3	89.13
1.0	(500.00)	1.5	(353.55)	0.91	85.83
1.5	(353.55)	2.0	(250.00)	0.01	84.92
2.0	(250.00)	2.5	(176.78)	0	84.91
2.5	(176.78)	3.0	(125.00)	0.22	84.91
3.0	(125.00)	3.5	(88.39)	1.61	84.69
3.5	(88.39)	4.0	(62.50)	4.14	83.08
4.0	(62.50)	4.5	(44.19)	7.15	78.94
4.5	(44.19)	5.0	(31.25)	9.3	71.79
5.0	(31.25)	5.5	(22.10)	9.72	62.49
5.5	(22.10)	6.0	(15.63)	8.81	52.77
6.0	(15.63)	6.5	(11.05)	7.49	43.96
6.5	(11.05)	7.0	(7.81)	6.37	36.47
7.0	(7.81)	7.5	(5.52)	5.61	30.09
7.5	(5.52)	8.0	(3.90)	5.05	24.49
8.0	(3.90)	8.5	(2.76)	4.58	19.43
8.5	(2.76)	9.0	(1.95)	4.14	14.86
9.0	(1.95)	9.5	(1.38)	3.66	10.72
9.5	(1.38)	10.0	(0.98)	3.02	7.05
10.0	(0.98)	10.5	(0.69)	2.19	4.03
10.5	(0.69)	11.0	(0.49)	1.3	1.85
11.0	(0.49)	11.5	(0.35)	0.52	0.55
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 31-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 8:07:19 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.48

D[4,3] = 45.01um = 4.47phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.37um = 8.72phi

D[v,0.5] = 13.39um = 6.22phi
D[v,0.84] = 41.87um = 4.58phi
D[v,0.95] = 73.98um = 3.76phi

Kurtosis = 55.14
Skewness = 7.21
Standard Deviation = 172.17 um = 2.54phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

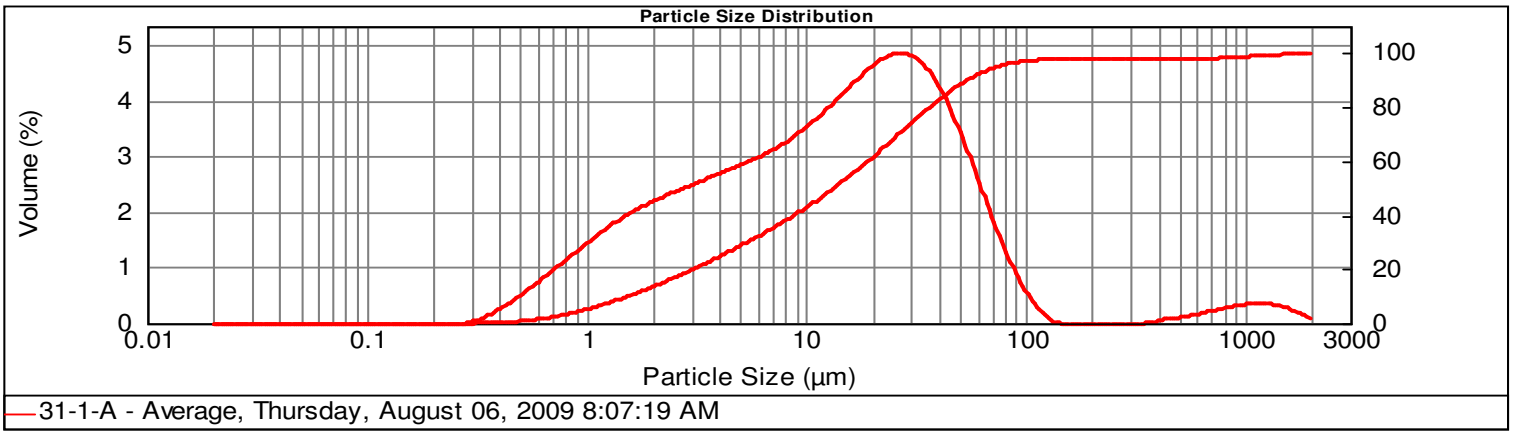
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.48
% Fine Silt (2-3.9 um) = 10.64

d (0.1) : 1.548 **um**
d (0.5) : 13.387 **d (0.9) : 53.762**

Wentworth
% Clay (0-3.9 um) = 24.12
% Silt (3.91-31 um) = 50.97
% Coarse Silt (31 - 62.5 um) = 17.65
% Very Fine sand (62.5 - 125 um) = 4.82

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .13
% Coarse sand (500-1000 um) = 1.01
% Very Coarse sand (1000 - 2000 um) = 1.27



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.49	100
-0.5	(1414.21)	0.0	(1000.00)	0.78	99.51
0.0	(1000.00)	0.5	(707.10)	0.65	98.73
0.5	(707.10)	1.0	(500.00)	0.36	98.08
1.0	(500.00)	1.5	(353.55)	0.13	97.72
1.5	(353.55)	2.0	(250.00)	0	97.59
2.0	(250.00)	2.5	(176.78)	0	97.59
2.5	(176.78)	3.0	(125.00)	0.02	97.59
3.0	(125.00)	3.5	(88.39)	1.06	97.57
3.5	(88.39)	4.0	(62.50)	3.76	96.51
4.0	(62.50)	4.5	(44.19)	7.31	92.75
4.5	(44.19)	5.0	(31.25)	10.09	85.43
5.0	(31.25)	5.5	(22.10)	10.96	75.35
5.5	(22.10)	6.0	(15.63)	10.24	64.39
6.0	(15.63)	6.5	(11.05)	8.95	54.15
6.5	(11.05)	7.0	(7.81)	7.78	45.21
7.0	(7.81)	7.5	(5.52)	6.95	37.43
7.5	(5.52)	8.0	(3.90)	6.33	30.48

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.78	24.15
8.5	(2.76)	9.0	(1.95)	5.22	18.37
9.0	(1.95)	9.5	(1.38)	4.57	13.15
9.5	(1.38)	10.0	(0.98)	3.7	8.58
10.0	(0.98)	10.5	(0.69)	2.64	4.88
10.5	(0.69)	11.0	(0.49)	1.55	2.24
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Results Report

Sample Name : 31-1-B - Average
Sample bulk lot ref :
Sample source :

Thursday, August 06, 2009 8:11:36 AM
Operator name : Julie

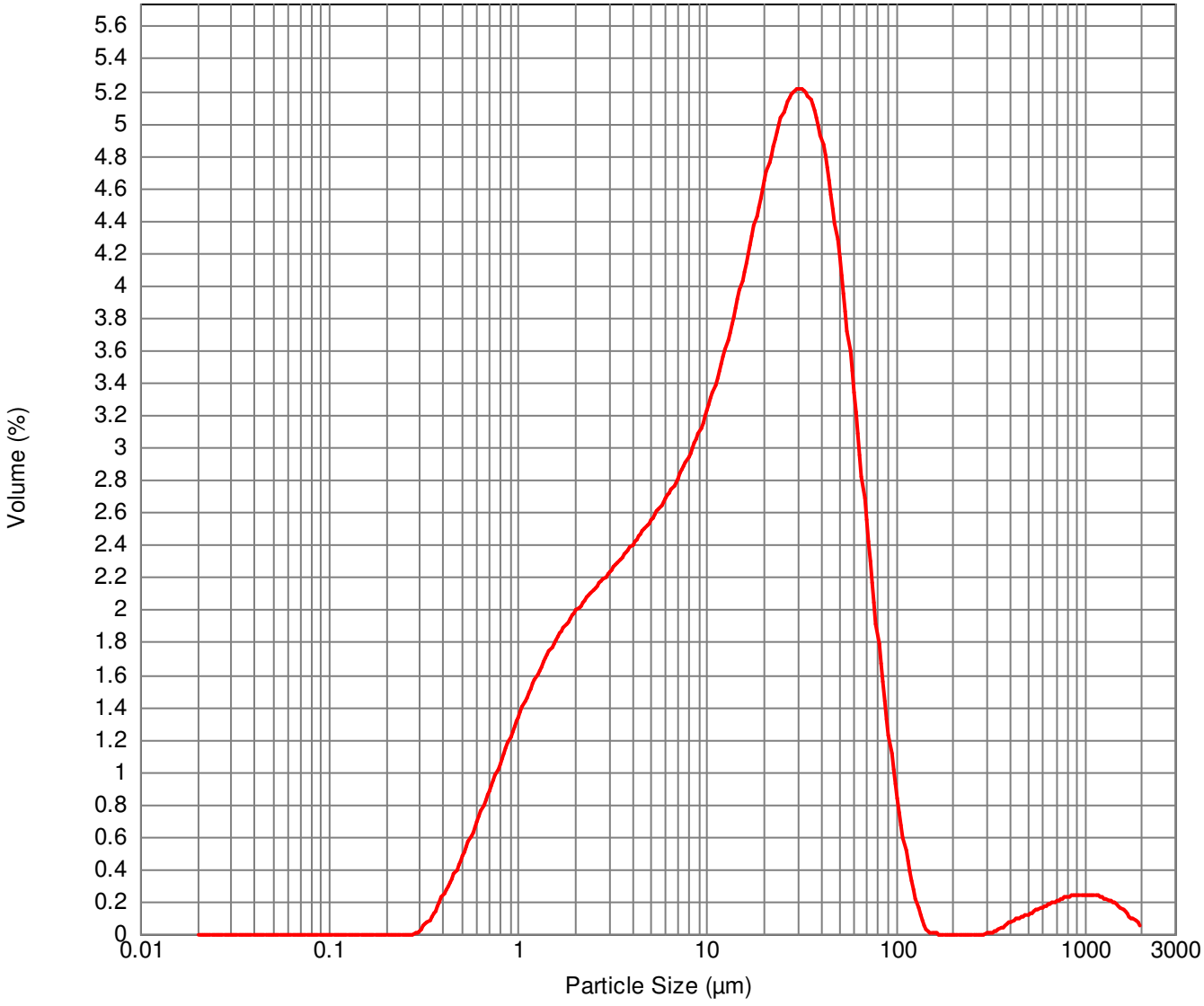
Particle name : Fraunhofer
Particle refractive index : 0.000

Obscuration : 14.42
Stirrer speed : 600
Pump speed : 1500

d (0.1) : 1.653
d (0.2) : 3.445

d (0.5) : 16.053
d (0.8) : 41.091
d (0.9) : 59.038

Particle Size Distribution



—31-1-B - Average, Thursday, August 06, 2009 8:11:36 AM

Size (µm)	Volume In %
0.010	0.00
0.011	0.00
0.013	0.00
0.015	0.00
0.017	0.00
0.020	0.00
0.023	0.00
0.026	0.00
0.030	0.00
0.035	0.00
0.040	0.00
0.046	0.00
0.052	0.00
0.060	0.00
0.069	0.00
0.079	0.00

Size (µm)	Volume In %
0.079	0.00
0.091	0.00
0.105	0.00
0.120	0.00
0.138	0.00
0.158	0.00
0.182	0.00
0.209	0.00
0.240	0.00
0.275	0.01
0.316	0.08
0.363	0.19
0.417	0.30
0.479	0.44
0.550	0.59
0.631	0.75

Size (µm)	Volume In %
0.631	0.75
0.724	0.91
0.832	1.07
0.955	1.23
1.096	1.37
1.259	1.50
1.445	1.62
1.660	1.71
1.905	1.80
2.188	1.88
2.512	1.95
2.884	2.02
3.311	2.09
3.802	2.17
4.365	2.25
5.012	2.34

Size (µm)	Volume In %
5.012	2.34
5.754	2.44
6.607	2.54
7.586	2.67
8.710	2.82
10.000	3.01
11.482	3.22
13.183	3.47
15.136	3.74
17.378	4.03
19.953	4.30
22.909	4.53
26.303	4.67
30.200	4.70
34.674	4.58
39.811	4.30

Size (µm)	Volume In %
39.811	4.30
45.709	3.86
52.481	3.31
60.256	2.67
69.183	2.02
79.433	1.41
91.201	0.89
104.713	0.48
120.226	0.18
138.038	0.02
158.489	0.00
181.970	0.00
208.930	0.00
239.883	0.00
275.423	0.00
316.228	0.00

Size (µm)	Volume In %
316.228	0.01
363.078	0.05
416.869	0.09
478.630	0.11
549.541	0.15
630.957	0.17
724.436	0.20
831.764	0.21
954.993	0.22
1096.478	0.21
1258.925	0.19
1445.440	0.15
1659.587	0.09
1905.461	0.02
2187.762	0.00
2511.886	0.00

Size (µm)	Volume In %
2511.886	0.00
2884.032	0.00
3311.311	0.00
3801.894	0.00
4365.158	0.00
5011.872	0.00
5754.399	0.00
6606.934	0.00
7585.776	0.00
8709.636	0.00
10000.000	0.00

Grain-Size Analysis Report

Sample: 31-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 8:18:17 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.51

D[4,3] = 43.21um = 4.53phi
D[v,0.05] = 1.01um = 9.94phi
D[v,0.16] = 2.53um = 8.63phi

D[v,0.5] = 15.71um = 5.99phi
D[v,0.84] = 46.47um = 4.43phi
D[v,0.95] = 78.72um = 3.67phi

Kurtosis = 66.03
Skewness = 7.8
Standard Deviation = 154.03 um = 2.7phi

Inclusive SD (Sorting Coeff.) = 2 phi (Very Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

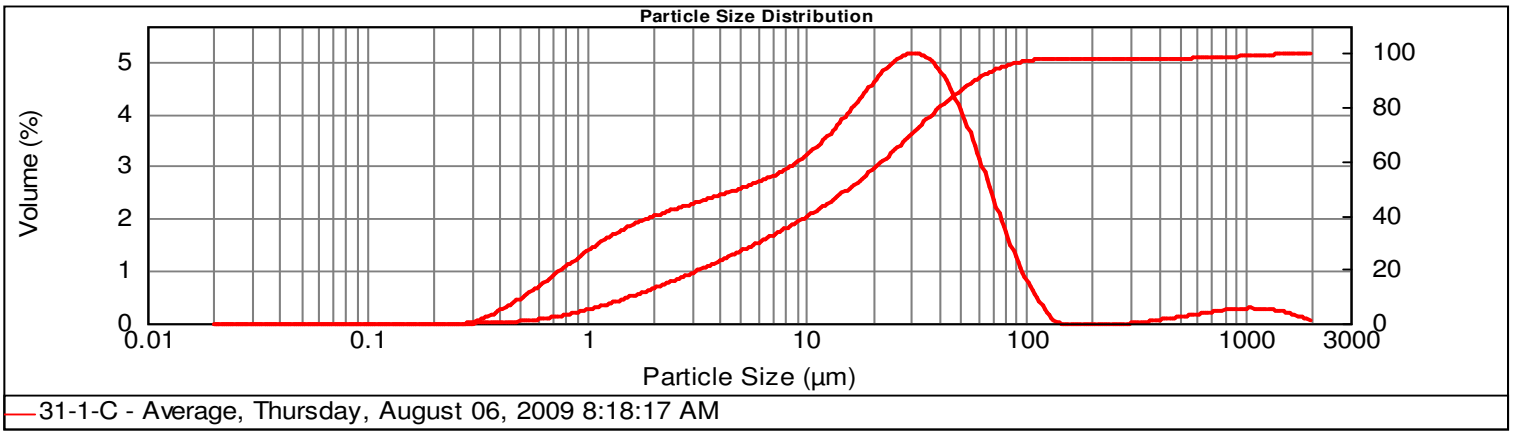
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.35 phi (Silt)

USGS
% Clay (0-2 um) = 12.75
% Fine Silt (2-3.9 um) = 9.75

d (0.1) : 1.614 **um**
d (0.5) : 15.706 **d (0.9) : 58.761**

Wentworth
% Clay (0-3.9 um) = 22.5
% Silt (3.91-31 um) = 48.5
% Coarse Silt (31 - 62.5 um) = 20.29
% Very Fine sand (62.5 - 125 um) = 6.52

% Fine sand (125-250 um) = .05
% Medium sand (250-500 um) = .18
% Coarse sand (500-1000 um) = .98
% Very Coarse sand (1000 - 2000 um) = .98



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.36	100
-0.5	(1414.21)	0.0	(1000.00)	0.62	99.64
0.0	(1000.00)	0.5	(707.10)	0.59	99.02
0.5	(707.10)	1.0	(500.00)	0.38	98.43
1.0	(500.00)	1.5	(353.55)	0.17	98.05
1.5	(353.55)	2.0	(250.00)	0.01	97.87
2.0	(250.00)	2.5	(176.78)	0	97.86
2.5	(176.78)	3.0	(125.00)	0.05	97.86
3.0	(125.00)	3.5	(88.39)	1.6	97.81
3.5	(88.39)	4.0	(62.50)	4.91	96.21
4.0	(62.50)	4.5	(44.19)	8.77	91.29
4.5	(44.19)	5.0	(31.25)	11.25	82.52
5.0	(31.25)	5.5	(22.10)	11.41	71.28
5.5	(22.10)	6.0	(15.63)	10	59.87
6.0	(15.63)	6.5	(11.05)	8.32	49.86
6.5	(11.05)	7.0	(7.81)	7.05	41.55
7.0	(7.81)	7.5	(5.52)	6.25	34.5
7.5	(5.52)	8.0	(3.90)	5.72	28.25

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.27	22.53
8.5	(2.76)	9.0	(1.95)	4.82	17.26
9.0	(1.95)	9.5	(1.38)	4.27	12.43
9.5	(1.38)	10.0	(0.98)	3.5	8.16
10.0	(0.98)	10.5	(0.69)	2.52	4.66
10.5	(0.69)	11.0	(0.49)	1.49	2.14
11.0	(0.49)	11.5	(0.35)	0.6	0.65
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 31-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 8:23:05 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.83

D[4,3] = 44.05um = 4.5phi
D[v,0.05] = 1.03um = 9.92phi
D[v,0.16] = 2.57um = 8.61phi

D[v,0.5] = 15.3um = 6.03phi
D[v,0.84] = 44.75um = 4.48phi
D[v,0.95] = 76.2um = 3.71phi

Kurtosis = 61.81
Skewness = 7.59
Standard Deviation = 161.8 um = 2.63phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

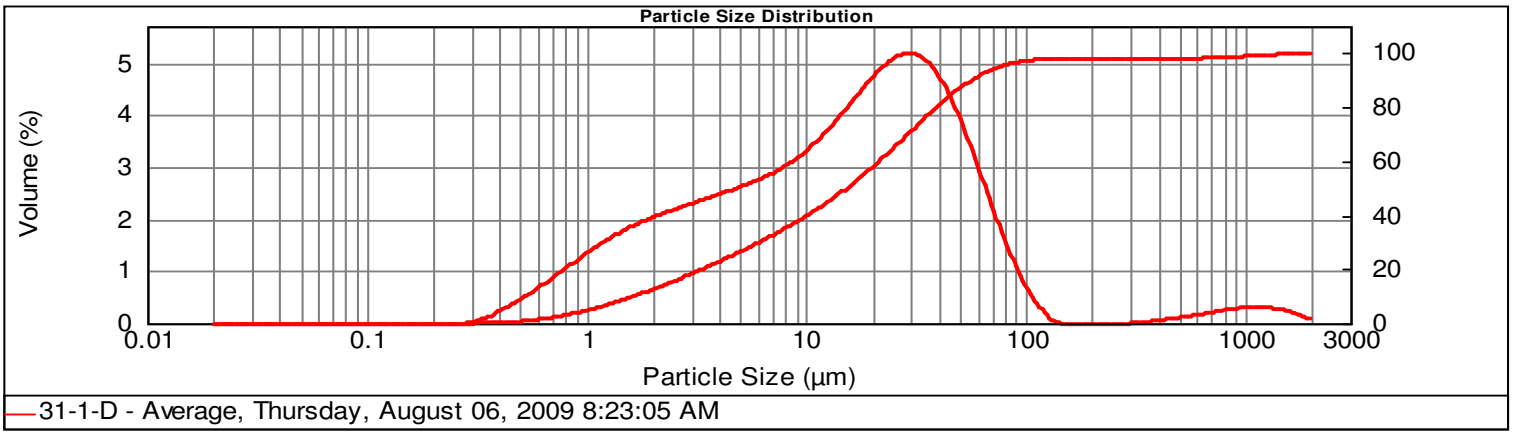
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.54
% Fine Silt (2-3.9 um) = 9.83

d (0.1) : 1.640 **um**
d (0.5) : 15.295 **d (0.9) : 56.633**

Wentworth
% Clay (0-3.9 um) = 22.37
% Silt (3.91-31 um) = 49.88
% Coarse Silt (31 - 62.5 um) = 19.74
% Very Fine sand (62.5 - 125 um) = 5.76

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = .15
% Coarse sand (500-1000 um) = .95
% Very Coarse sand (1000 - 2000 um) = 1.11



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.42	100
-0.5	(1414.21)	0.0	(1000.00)	0.69	99.58
0.0	(1000.00)	0.5	(707.10)	0.6	98.89
0.5	(707.10)	1.0	(500.00)	0.35	98.29
1.0	(500.00)	1.5	(353.55)	0.15	97.94
1.5	(353.55)	2.0	(250.00)	0.01	97.8
2.0	(250.00)	2.5	(176.78)	0	97.79
2.5	(176.78)	3.0	(125.00)	0.03	97.79
3.0	(125.00)	3.5	(88.39)	1.32	97.76
3.5	(88.39)	4.0	(62.50)	4.45	96.44
4.0	(62.50)	4.5	(44.19)	8.35	91.99
4.5	(44.19)	5.0	(31.25)	11.11	83.64
5.0	(31.25)	5.5	(22.10)	11.59	72.53
5.5	(22.10)	6.0	(15.63)	10.35	60.93
6.0	(15.63)	6.5	(11.05)	8.65	50.58
6.5	(11.05)	7.0	(7.81)	7.29	41.93
7.0	(7.81)	7.5	(5.52)	6.41	34.64
7.5	(5.52)	8.0	(3.90)	5.83	28.23
8.0	(3.90)	8.5	(2.76)	5.33	22.4
8.5	(2.76)	9.0	(1.95)	4.84	17.06
9.0	(1.95)	9.5	(1.38)	4.25	12.23
9.5	(1.38)	10.0	(0.98)	3.45	7.98
10.0	(0.98)	10.5	(0.69)	2.46	4.53
10.5	(0.69)	11.0	(0.49)	1.44	2.07
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 31-1-DM - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 9:22:06 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.10

D[4,3] = 44.26um = 4.5phi
D[v,0.05] = .79um = 10.31phi
D[v,0.16] = 1.47um = 9.41phi

D[v,0.5] = 4.65um = 7.75phi
D[v,0.84] = 16.65um = 5.91phi
D[v,0.95] = 46.98um = 4.41phi

Kurtosis = 36.86
Skewness = 5.92
Standard Deviation = 196.4 um = 2.35phi

Inclusive SD (Sorting Coeff.) = 1.77 phi (Poorly Sorted)
Inclusive Kurtosis = 1.01 phi (Mesokurtic)

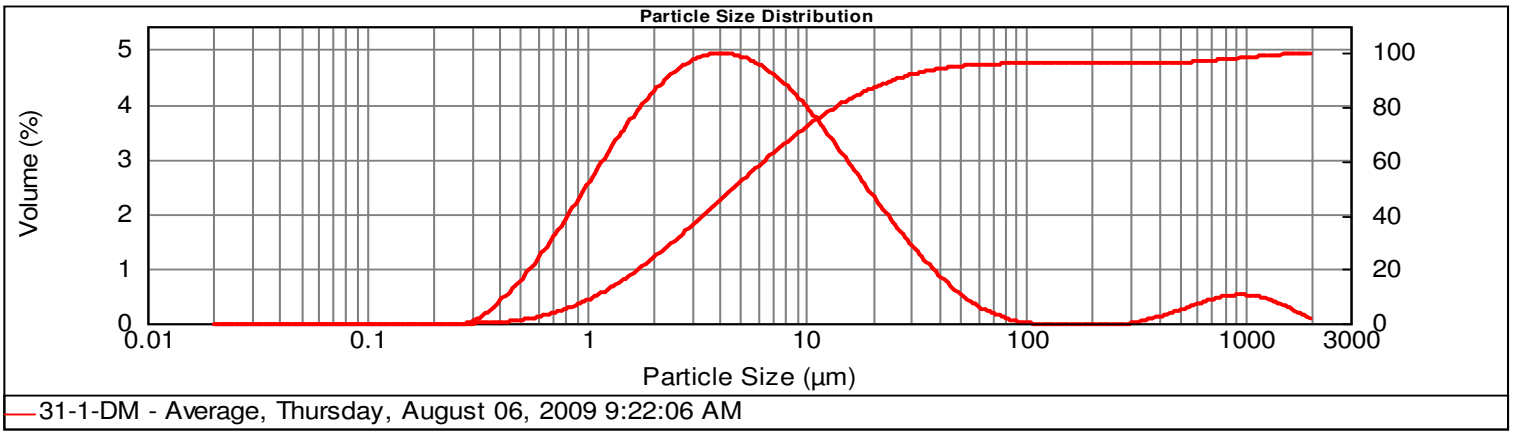
Inclusive Skewness = .09 (Near Symmetrical)
Inclusive Mean = 7.69 phi (Silt)

USGS
% Clay (0-2 um) = 23.91
% Fine Silt (2-3.9 um) = 20.4

d (0.1) : 1.094 **um**
d (0.5) : 4.654 **d (0.9) : 24.820**

Wentworth
% Clay (0-3.9 um) = 44.31
% Silt (3.91-31 um) = 48.02
% Coarse Silt (31 - 62.5 um) = 3.49
% Very Fine sand (62.5 - 125 um) = .36

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = 1.9
% Very Coarse sand (1000 - 2000 um) = 1.56



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.52	100
-0.5	(1414.21)	0.0	(1000.00)	1.04	99.48
0.0	(1000.00)	0.5	(707.10)	1.12	98.44
0.5	(707.10)	1.0	(500.00)	0.78	97.32
1.0	(500.00)	1.5	(353.55)	0.33	96.54
1.5	(353.55)	2.0	(250.00)	0.03	96.21
2.0	(250.00)	2.5	(176.78)	0	96.19
2.5	(176.78)	3.0	(125.00)	0	96.19
3.0	(125.00)	3.5	(88.39)	0.02	96.19
3.5	(88.39)	4.0	(62.50)	0.35	96.17
4.0	(62.50)	4.5	(44.19)	1.09	95.82
4.5	(44.19)	5.0	(31.25)	2.33	94.73
5.0	(31.25)	5.5	(22.10)	3.9	92.4
5.5	(22.10)	6.0	(15.63)	5.69	88.5
6.0	(15.63)	6.5	(11.05)	7.58	82.81
6.5	(11.05)	7.0	(7.81)	9.28	75.23
7.0	(7.81)	7.5	(5.52)	10.5	65.96
7.5	(5.52)	8.0	(3.90)	11.1	55.46

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	10.99	44.36
8.5	(2.76)	9.0	(1.95)	10.12	33.38
9.0	(1.95)	9.5	(1.38)	8.59	23.26
9.5	(1.38)	10.0	(0.98)	6.61	14.67
10.0	(0.98)	10.5	(0.69)	4.47	8.06
10.5	(0.69)	11.0	(0.49)	2.52	3.59
11.0	(0.49)	11.5	(0.35)	0.98	1.07
11.5	(0.35)	12.0	(0.24)	0.09	0.09
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 31-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 8:27:51 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.84

D[4,3] = 46.25um = 4.43phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.67um = 8.55phi

D[v,0.5] = 15.9um = 5.98phi
D[v,0.84] = 45.67um = 4.45phi
D[v,0.95] = 77.93um = 3.68phi

Kurtosis = 54.67
Skewness = 7.2
Standard Deviation = 168.35 um = 2.57phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

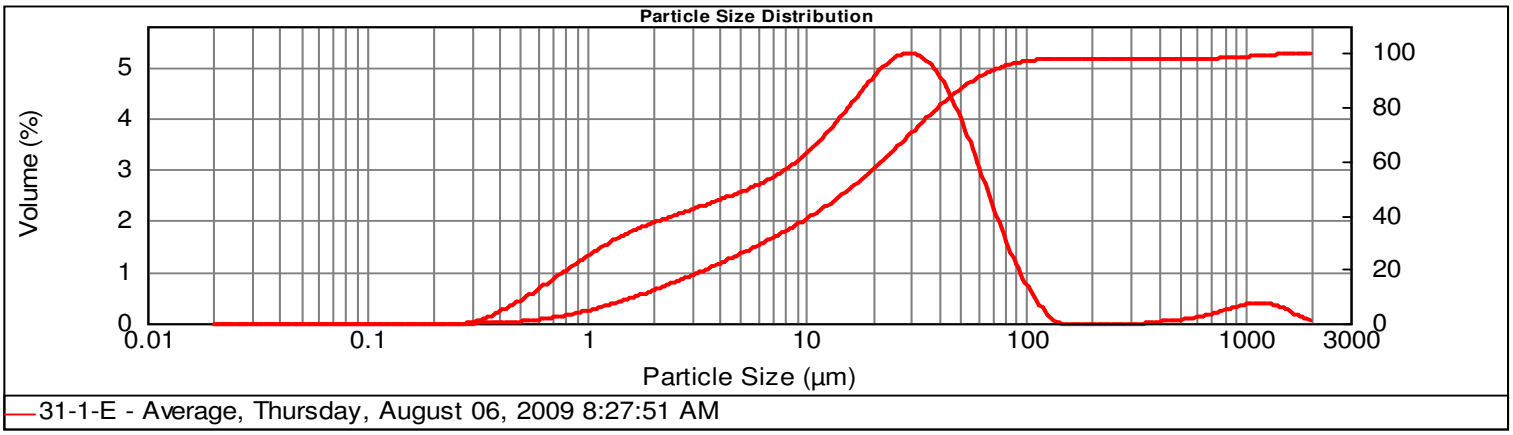
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.32 phi (Silt)

USGS
% Clay (0-2 um) = 12.11
% Fine Silt (2-3.9 um) = 9.47

d (0.1) : 1.686 **um**
d (0.5) : 15.897 **d (0.9) : 57.794**

Wentworth
% Clay (0-3.9 um) = 21.58
% Silt (3.91-31 um) = 49.88
% Coarse Silt (31 - 62.5 um) = 20.14
% Very Fine sand (62.5 - 125 um) = 6.08

% Fine sand (125-250 um) = .04
% Medium sand (250-500 um) = .08
% Coarse sand (500-1000 um) = .91
% Very Coarse sand (1000 - 2000 um) = 1.29



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.42	100
-0.5	(1414.21)	0.0	(1000.00)	0.87	99.58
0.0	(1000.00)	0.5	(707.10)	0.64	98.71
0.5	(707.10)	1.0	(500.00)	0.27	98.07
1.0	(500.00)	1.5	(353.55)	0.08	97.8
1.5	(353.55)	2.0	(250.00)	0	97.72
2.0	(250.00)	2.5	(176.78)	0	97.72
2.5	(176.78)	3.0	(125.00)	0.04	97.72
3.0	(125.00)	3.5	(88.39)	1.44	97.68
3.5	(88.39)	4.0	(62.50)	4.64	96.24
4.0	(62.50)	4.5	(44.19)	8.56	91.6
4.5	(44.19)	5.0	(31.25)	11.31	83.04
5.0	(31.25)	5.5	(22.10)	11.75	71.74
5.5	(22.10)	6.0	(15.63)	10.46	59.98
6.0	(15.63)	6.5	(11.05)	8.69	49.52
6.5	(11.05)	7.0	(7.81)	7.25	40.83
7.0	(7.81)	7.5	(5.52)	6.31	33.58
7.5	(5.52)	8.0	(3.90)	5.67	27.28

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.15	21.61
8.5	(2.76)	9.0	(1.95)	4.65	16.46
9.0	(1.95)	9.5	(1.38)	4.08	11.81
9.5	(1.38)	10.0	(0.98)	3.33	7.73
10.0	(0.98)	10.5	(0.69)	2.39	4.4
10.5	(0.69)	11.0	(0.49)	1.4	2.01
11.0	(0.49)	11.5	(0.35)	0.56	0.61
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 31-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Julie

Measured: Thursday, August 06, 2009 8:56:33 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.95

D[4,3] = 40.69um = 4.62phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.41um = 8.69phi

D[v,0.5] = 13.75um = 6.18phi
D[v,0.84] = 41.68um = 4.58phi
D[v,0.95] = 71.94um = 3.8phi

Kurtosis = 65.98
Skewness = 7.76
Standard Deviation = 149.29 um = 2.74phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

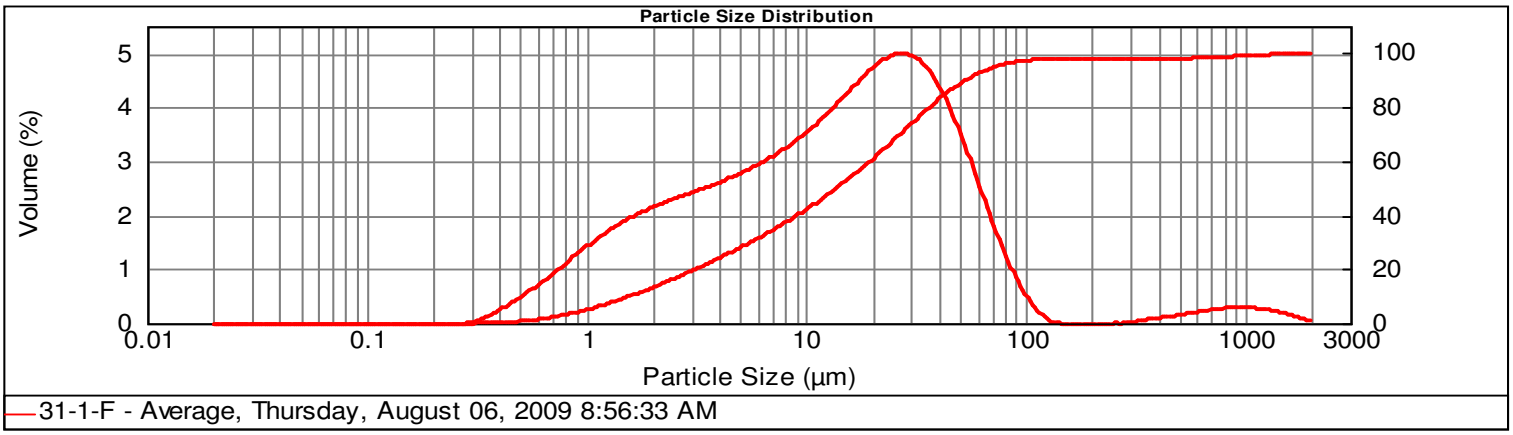
Inclusive Skewness = -0.22 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 13.26
% Fine Silt (2-3.9 um) = 10.37

d (0.1) : 1.569 **um**
d (0.5) : 13.748 **d (0.9) : 53.050**

Wentworth
% Clay (0-3.9 um) = 23.63
% Silt (3.91-31 um) = 51.31
% Coarse Silt (31 - 62.5 um) = 18.13
% Very Fine sand (62.5 - 125 um) = 4.65

% Fine sand (125-250 um) = .01
% Medium sand (250-500 um) = .29
% Coarse sand (500-1000 um) = 1.1
% Very Coarse sand (1000 - 2000 um) = .88



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.3	100
-0.5	(1414.21)	0.0	(1000.00)	0.59	99.7
0.0	(1000.00)	0.5	(707.10)	0.64	99.12
0.5	(707.10)	1.0	(500.00)	0.47	98.48
1.0	(500.00)	1.5	(353.55)	0.25	98.01
1.5	(353.55)	2.0	(250.00)	0.04	97.77
2.0	(250.00)	2.5	(176.78)	0	97.73
2.5	(176.78)	3.0	(125.00)	0.01	97.73
3.0	(125.00)	3.5	(88.39)	0.94	97.71
3.5	(88.39)	4.0	(62.50)	3.71	96.77
4.0	(62.50)	4.5	(44.19)	7.46	93.06
4.5	(44.19)	5.0	(31.25)	10.41	85.6
5.0	(31.25)	5.5	(22.10)	11.27	75.2
5.5	(22.10)	6.0	(15.63)	10.43	63.93
6.0	(15.63)	6.5	(11.05)	9.03	53.5
6.5	(11.05)	7.0	(7.81)	7.79	44.47
7.0	(7.81)	7.5	(5.52)	6.86	36.68
7.5	(5.52)	8.0	(3.90)	6.16	29.82

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.61	23.66
8.5	(2.76)	9.0	(1.95)	5.11	18.04
9.0	(1.95)	9.5	(1.38)	4.5	12.93
9.5	(1.38)	10.0	(0.98)	3.65	8.43
10.0	(0.98)	10.5	(0.69)	2.6	4.78
10.5	(0.69)	11.0	(0.49)	1.52	2.18
11.0	(0.49)	11.5	(0.35)	0.61	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 32-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 1:20:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.67

D[4,3] = 20.31um = 5.62phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.36um = 8.73phi

D[v,0.5] = 13.52um = 6.21phi
D[v,0.84] = 40.19um = 4.64phi
D[v,0.95] = 62.3um = 4phi

Kurtosis = 1.69
Skewness = 1.38
Standard Deviation = 20.35 um = 5.62phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .84 phi (Platykurtic)

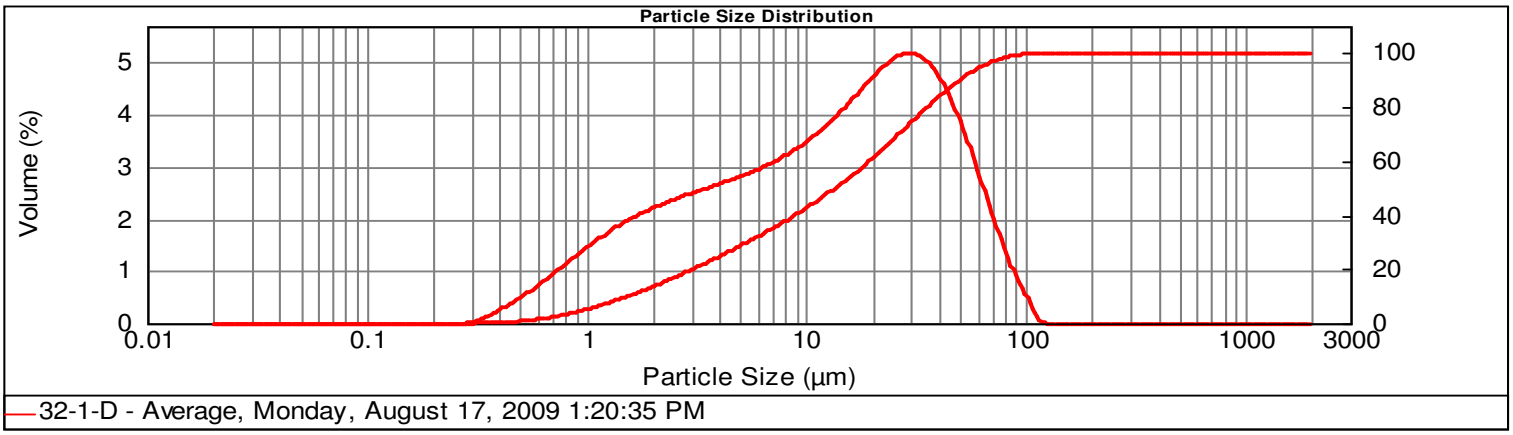
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.52 phi (Silt)

USGS
% Clay (0-2 um) = 13.55
% Fine Silt (2-3.9 um) = 10.64

d (0.1) : 1.543 **um**
d (0.5) : 13.523 **d (0.9) : 49.587**

Wentworth
% Clay (0-3.9 um) = 24.19
% Silt (3.91-31 um) = 51.3
% Coarse Silt (31 - 62.5 um) = 19.57
% Very Fine sand (62.5 - 125 um) = 4.94

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0	100
3.0	(125.00)	3.5	(88.39)	0.85	100
3.5	(88.39)	4.0	(62.50)	4.09	99.15
4.0	(62.50)	4.5	(44.19)	8.21	95.06
4.5	(44.19)	5.0	(31.25)	11.09	86.85
5.0	(31.25)	5.5	(22.10)	11.55	75.76
5.5	(22.10)	6.0	(15.63)	10.35	64.21
6.0	(15.63)	6.5	(11.05)	8.84	53.86
6.5	(11.05)	7.0	(7.81)	7.67	45.01
7.0	(7.81)	7.5	(5.52)	6.86	37.34
7.5	(5.52)	8.0	(3.90)	6.26	30.48

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.76	24.22
8.5	(2.76)	9.0	(1.95)	5.25	18.45
9.0	(1.95)	9.5	(1.38)	4.6	13.21
9.5	(1.38)	10.0	(0.98)	3.72	8.61
10.0	(0.98)	10.5	(0.69)	2.65	4.89
10.5	(0.69)	11.0	(0.49)	1.55	2.23
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 32-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 1:25:01 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.55

D[4,3] = 20.89um = 5.58phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.39um = 8.71phi

D[v,0.5] = 13.85um = 6.17phi
D[v,0.84] = 41.15um = 4.6phi
D[v,0.95] = 64.51um = 3.95phi

Kurtosis = 2.07
Skewness = 1.46
Standard Deviation = 21.17 um = 5.56phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .85 phi (Platykurtic)

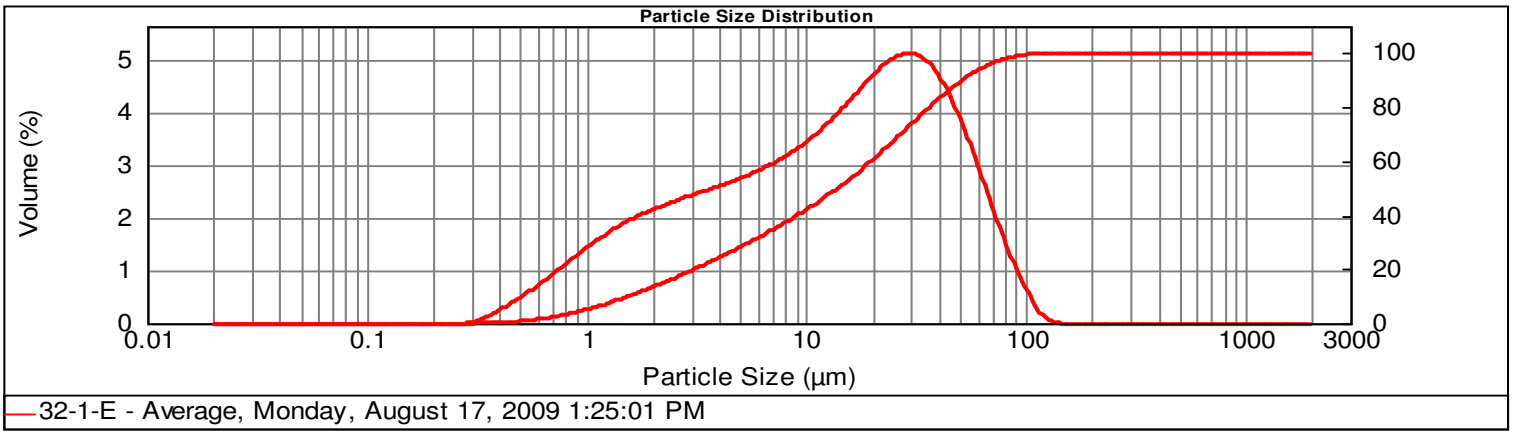
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 13.43
% Fine Silt (2-3.9 um) = 10.43

d (0.1) : 1.551 **um**
d (0.5) : 13.851 **d (0.9) : 51.006**

Wentworth
% Clay (0-3.9 um) = 23.86
% Silt (3.91-31 um) = 50.96
% Coarse Silt (31 - 62.5 um) = 19.61
% Very Fine sand (62.5 - 125 um) = 5.54

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.03	100
3.0	(125.00)	3.5	(88.39)	1.16	99.97
3.5	(88.39)	4.0	(62.50)	4.38	98.81
4.0	(62.50)	4.5	(44.19)	8.31	94.43
4.5	(44.19)	5.0	(31.25)	11.03	86.12
5.0	(31.25)	5.5	(22.10)	11.5	75.09
5.5	(22.10)	6.0	(15.63)	10.36	63.59
6.0	(15.63)	6.5	(11.05)	8.84	53.24
6.5	(11.05)	7.0	(7.81)	7.61	44.4
7.0	(7.81)	7.5	(5.52)	6.76	36.79
7.5	(5.52)	8.0	(3.90)	6.14	30.03

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.64	23.89
8.5	(2.76)	9.0	(1.95)	5.15	18.24
9.0	(1.95)	9.5	(1.38)	4.53	13.1
9.5	(1.38)	10.0	(0.98)	3.69	8.56
10.0	(0.98)	10.5	(0.69)	2.64	4.87
10.5	(0.69)	11.0	(0.49)	1.55	2.23
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 32-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 1:30:20 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.21

D[4,3] = 20.9um = 5.58phi
D[v,0.05] = 1um = 9.97phi
D[v,0.16] = 2.4um = 8.7phi

D[v,0.5] = 13.88um = 6.17phi
D[v,0.84] = 41.1um = 4.6phi
D[v,0.95] = 64.5um = 3.95phi

Kurtosis = 2.11
Skewness = 1.46
Standard Deviation = 21.17 um = 5.56phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .85 phi (Platykurtic)

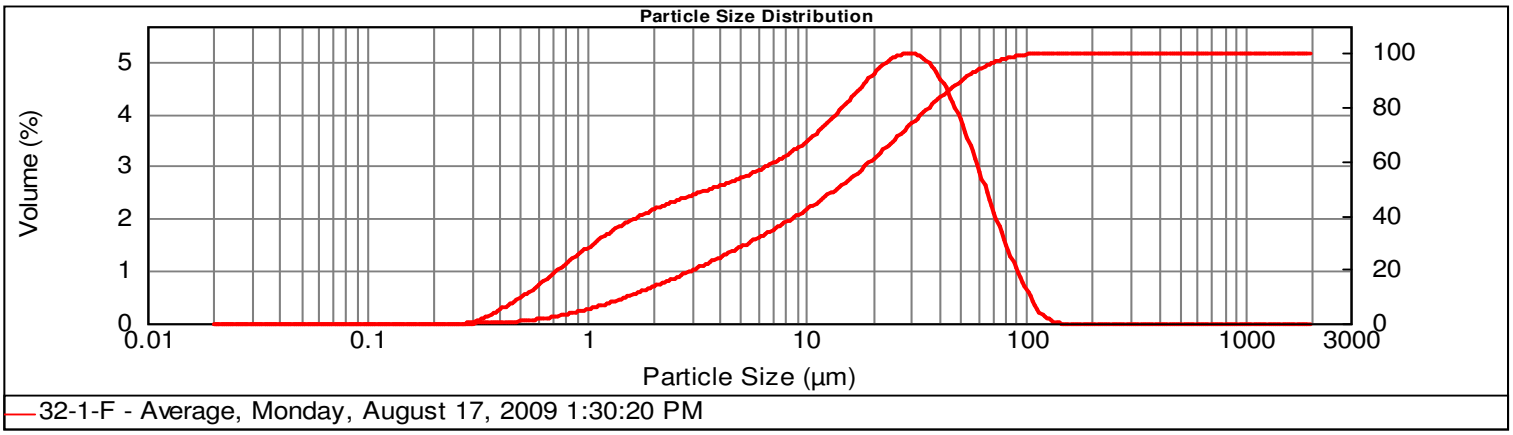
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.49 phi (Silt)

USGS
% Clay (0-2 um) = 13.32
% Fine Silt (2-3.9 um) = 10.42

d (0.1) : 1.563 **um**
d (0.5) : 13.876 **d (0.9) : 50.967**

Wentworth
% Clay (0-3.9 um) = 23.74
% Silt (3.91-31 um) = 51.12
% Coarse Silt (31 - 62.5 um) = 19.58
% Very Fine sand (62.5 - 125 um) = 5.54

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.03	100
3.0	(125.00)	3.5	(88.39)	1.17	99.97
3.5	(88.39)	4.0	(62.50)	4.37	98.8
4.0	(62.50)	4.5	(44.19)	8.28	94.44
4.5	(44.19)	5.0	(31.25)	11.02	86.15
5.0	(31.25)	5.5	(22.10)	11.52	75.13
5.5	(22.10)	6.0	(15.63)	10.4	63.6
6.0	(15.63)	6.5	(11.05)	8.87	53.2
6.5	(11.05)	7.0	(7.81)	7.64	44.33
7.0	(7.81)	7.5	(5.52)	6.77	36.69
7.5	(5.52)	8.0	(3.90)	6.15	29.92

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.65	23.77
8.5	(2.76)	9.0	(1.95)	5.14	18.12
9.0	(1.95)	9.5	(1.38)	4.51	12.99
9.5	(1.38)	10.0	(0.98)	3.66	8.48
10.0	(0.98)	10.5	(0.69)	2.61	4.82
10.5	(0.69)	11.0	(0.49)	1.54	2.21
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:28:08 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.79

D[4,3] = 32.01um = 4.97phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.8um = 8.48phi

D[v,0.5] = 16.01um = 5.96phi
D[v,0.84] = 46.37um = 4.43phi
D[v,0.95] = 77.01um = 3.7phi

Kurtosis = 109.38
Skewness = 9.75
Standard Deviation = 89.09 um = 3.49phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

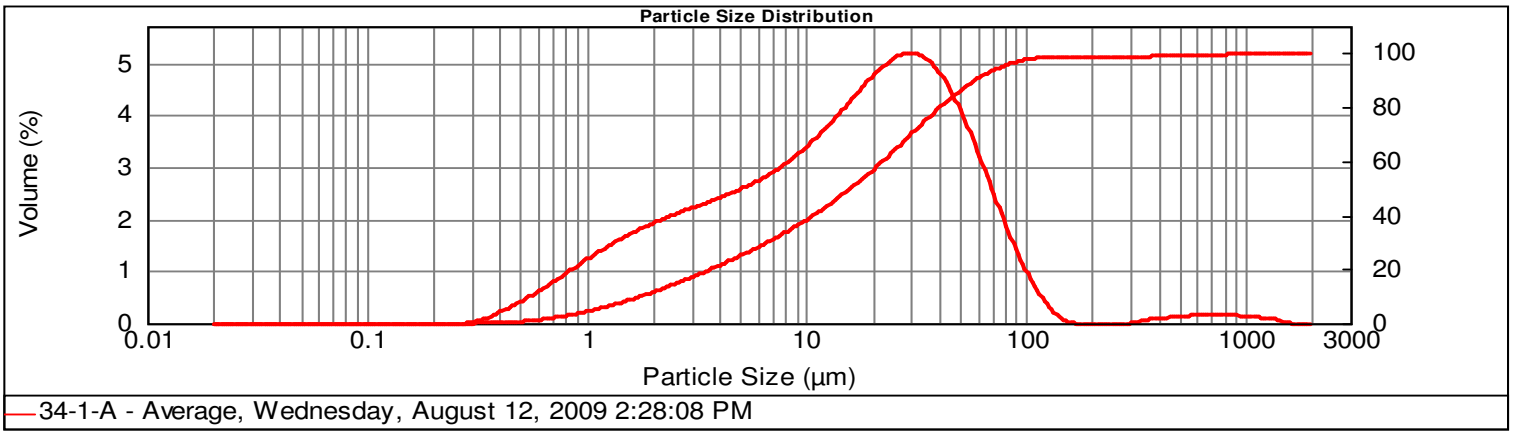
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.29 phi (Silt)

USGS
% Clay (0-2 um) = 11.49
% Fine Silt (2-3.9 um) = 9.43

d (0.1) : 1.771 **um**
d (0.5) : 16.014 **d (0.9) : 58.496**

Wentworth
% Clay (0-3.9 um) = 20.92
% Silt (3.91-31 um) = 50.15
% Coarse Silt (31 - 62.5 um) = 20.36
% Very Fine sand (62.5 - 125 um) = 7.15

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .26
% Coarse sand (500-1000 um) = .68
% Very Coarse sand (1000 - 2000 um) = .26



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.02	100
-0.5	(1414.21)	0.0	(1000.00)	0.24	99.98
0.0	(1000.00)	0.5	(707.10)	0.35	99.74
0.5	(707.10)	1.0	(500.00)	0.34	99.4
1.0	(500.00)	1.5	(353.55)	0.23	99.06
1.5	(353.55)	2.0	(250.00)	0.03	98.83
2.0	(250.00)	2.5	(176.78)	0	98.8
2.5	(176.78)	3.0	(125.00)	0.23	98.8
3.0	(125.00)	3.5	(88.39)	1.95	98.57
3.5	(88.39)	4.0	(62.50)	5.2	96.62
4.0	(62.50)	4.5	(44.19)	8.83	91.42
4.5	(44.19)	5.0	(31.25)	11.25	82.59
5.0	(31.25)	5.5	(22.10)	11.6	71.34
5.5	(22.10)	6.0	(15.63)	10.43	59.74
6.0	(15.63)	6.5	(11.05)	8.81	49.31
6.5	(11.05)	7.0	(7.81)	7.43	40.5
7.0	(7.81)	7.5	(5.52)	6.42	33.07
7.5	(5.52)	8.0	(3.90)	5.71	26.65
8.0	(3.90)	8.5	(2.76)	5.15	20.94
8.5	(2.76)	9.0	(1.95)	4.6	15.79
9.0	(1.95)	9.5	(1.38)	3.96	11.19
9.5	(1.38)	10.0	(0.98)	3.16	7.23
10.0	(0.98)	10.5	(0.69)	2.22	4.07
10.5	(0.69)	11.0	(0.49)	1.29	1.85
11.0	(0.49)	11.5	(0.35)	0.51	0.56
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:32:33 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.26

D[4,3] = 38.93um = 4.68phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.68um = 8.54phi

D[v,0.5] = 15.89um = 5.98phi
D[v,0.84] = 47.04um = 4.41phi
D[v,0.95] = 79.11um = 3.66phi

Kurtosis = 86.93
Skewness = 8.87
Standard Deviation = 134.29 um = 2.9phi

Inclusive SD (Sorting Coeff.) = 1.98 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

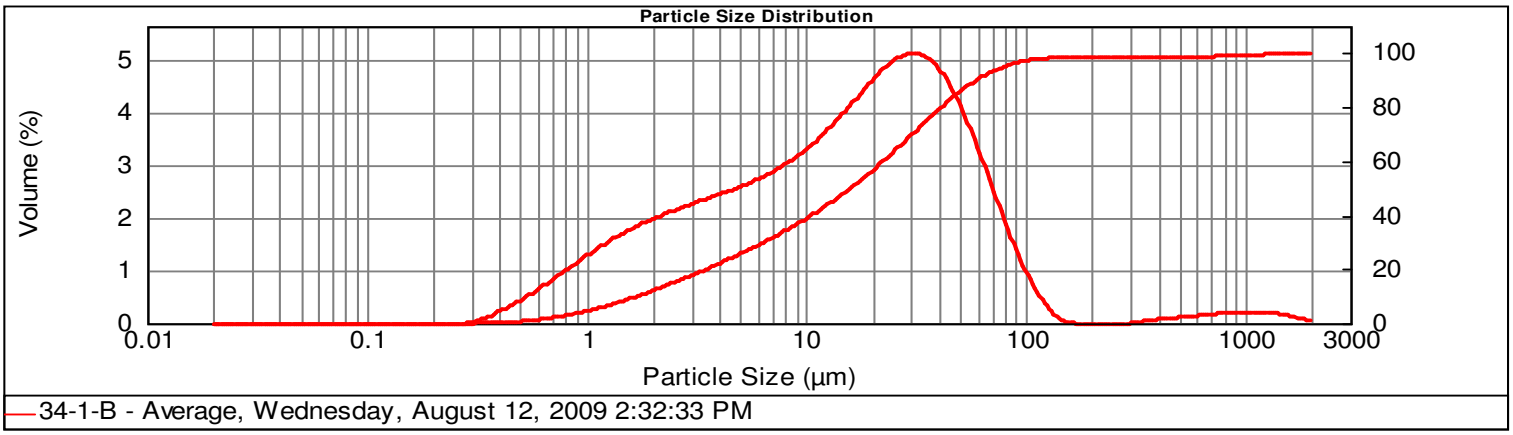
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.31 phi (Silt)

USGS
% Clay (0-2 um) = 12
% Fine Silt (2-3.9 um) = 9.63

d (0.1) : 1.704 **um**
d (0.5) : 15.892 **d (0.9) : 59.511**

Wentworth
% Clay (0-3.9 um) = 21.64
% Silt (3.91-31 um) = 49.09
% Coarse Silt (31 - 62.5 um) = 20.32
% Very Fine sand (62.5 - 125 um) = 7.08

% Fine sand (125-250 um) = .18
% Medium sand (250-500 um) = .2
% Coarse sand (500-1000 um) = .76
% Very Coarse sand (1000 - 2000 um) = .72



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.27	100
-0.5	(1414.21)	0.0	(1000.00)	0.46	99.73
0.0	(1000.00)	0.5	(707.10)	0.44	99.28
0.5	(707.10)	1.0	(500.00)	0.32	98.83
1.0	(500.00)	1.5	(353.55)	0.18	98.52
1.5	(353.55)	2.0	(250.00)	0.02	98.33
2.0	(250.00)	2.5	(176.78)	0	98.31
2.5	(176.78)	3.0	(125.00)	0.18	98.31
3.0	(125.00)	3.5	(88.39)	1.88	98.13
3.5	(88.39)	4.0	(62.50)	5.2	96.25
4.0	(62.50)	4.5	(44.19)	8.87	91.05
4.5	(44.19)	5.0	(31.25)	11.18	82.17
5.0	(31.25)	5.5	(22.10)	11.36	70.99
5.5	(22.10)	6.0	(15.63)	10.09	59.64
6.0	(15.63)	6.5	(11.05)	8.52	49.54
6.5	(11.05)	7.0	(7.81)	7.25	41.02
7.0	(7.81)	7.5	(5.52)	6.37	33.77
7.5	(5.52)	8.0	(3.90)	5.75	27.41

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.24	21.66
8.5	(2.76)	9.0	(1.95)	4.72	16.42
9.0	(1.95)	9.5	(1.38)	4.1	11.7
9.5	(1.38)	10.0	(0.98)	3.29	7.6
10.0	(0.98)	10.5	(0.69)	2.33	4.31
10.5	(0.69)	11.0	(0.49)	1.37	1.97
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 2:37:19 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.19

D[4,3] = 31.12um = 5.01phi
D[v,0.05] = 1.07um = 9.86phi
D[v,0.16] = 2.71um = 8.53phi

D[v,0.5] = 16um = 5.97phi
D[v,0.84] = 47.05um = 4.41phi
D[v,0.95] = 78.06um = 3.68phi

Kurtosis = 147.78
Skewness = 10.96
Standard Deviation = 84.46 um = 3.57phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

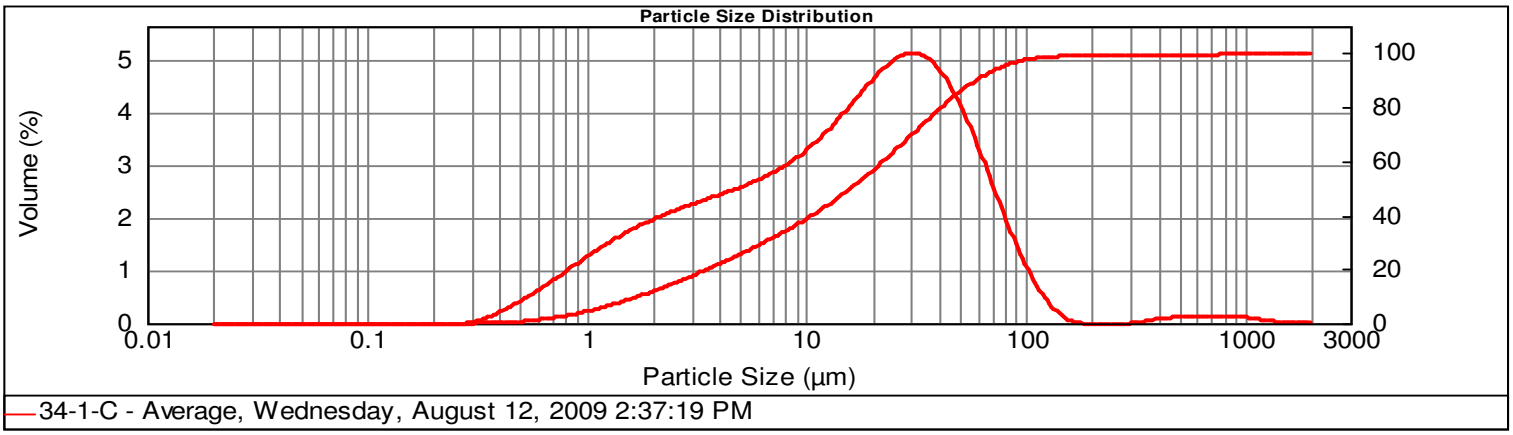
Inclusive Skewness = -0.25 (Coarse Skewed)
Inclusive Mean = 6.3 phi (Silt)

USGS
% Clay (0-2 um) = 11.83
% Fine Silt (2-3.9 um) = 9.64

d (0.1) : 1.727 **um**
d (0.5) : 15.995 **d (0.9) : 59.385**

Wentworth
% Clay (0-3.9 um) = 21.47
% Silt (3.91-31 um) = 49.2
% Coarse Silt (31 - 62.5 um) = 20.44
% Very Fine sand (62.5 - 125 um) = 7.54

% Fine sand (125-250 um) = .32
% Medium sand (250-500 um) = .23
% Coarse sand (500-1000 um) = .6
% Very Coarse sand (1000 - 2000 um) = .2



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.05	100
-0.5	(1414.21)	0.0	(1000.00)	0.15	99.95
0.0	(1000.00)	0.5	(707.10)	0.29	99.8
0.5	(707.10)	1.0	(500.00)	0.31	99.51
1.0	(500.00)	1.5	(353.55)	0.21	99.2
1.5	(353.55)	2.0	(250.00)	0.02	98.99
2.0	(250.00)	2.5	(176.78)	0	98.97
2.5	(176.78)	3.0	(125.00)	0.32	98.97
3.0	(125.00)	3.5	(88.39)	2.14	98.65
3.5	(88.39)	4.0	(62.50)	5.4	96.51
4.0	(62.50)	4.5	(44.19)	8.95	91.11
4.5	(44.19)	5.0	(31.25)	11.22	82.16
5.0	(31.25)	5.5	(22.10)	11.42	70.94
5.5	(22.10)	6.0	(15.63)	10.15	59.52
6.0	(15.63)	6.5	(11.05)	8.53	49.37
6.5	(11.05)	7.0	(7.81)	7.24	40.83
7.0	(7.81)	7.5	(5.52)	6.35	33.6
7.5	(5.52)	8.0	(3.90)	5.75	27.24
8.0	(3.90)	8.5	(2.76)	5.25	21.5
8.5	(2.76)	9.0	(1.95)	4.72	16.25
9.0	(1.95)	9.5	(1.38)	4.08	11.53
9.5	(1.38)	10.0	(0.98)	3.26	7.45
10.0	(0.98)	10.5	(0.69)	2.29	4.2
10.5	(0.69)	11.0	(0.49)	1.33	1.9
11.0	(0.49)	11.5	(0.35)	0.53	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-G - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 2:23:08 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.48

D[4,3] = 34.09um = 4.87phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.7um = 8.53phi

D[v,0.5] = 16.77um = 5.9phi
D[v,0.84] = 48.59um = 4.36phi
D[v,0.95] = 80.16um = 3.64phi

Kurtosis = 114.14
Skewness = 9.76
Standard Deviation = 96.28 um = 3.38phi

Inclusive SD (Sorting Coeff.) = 1.99 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

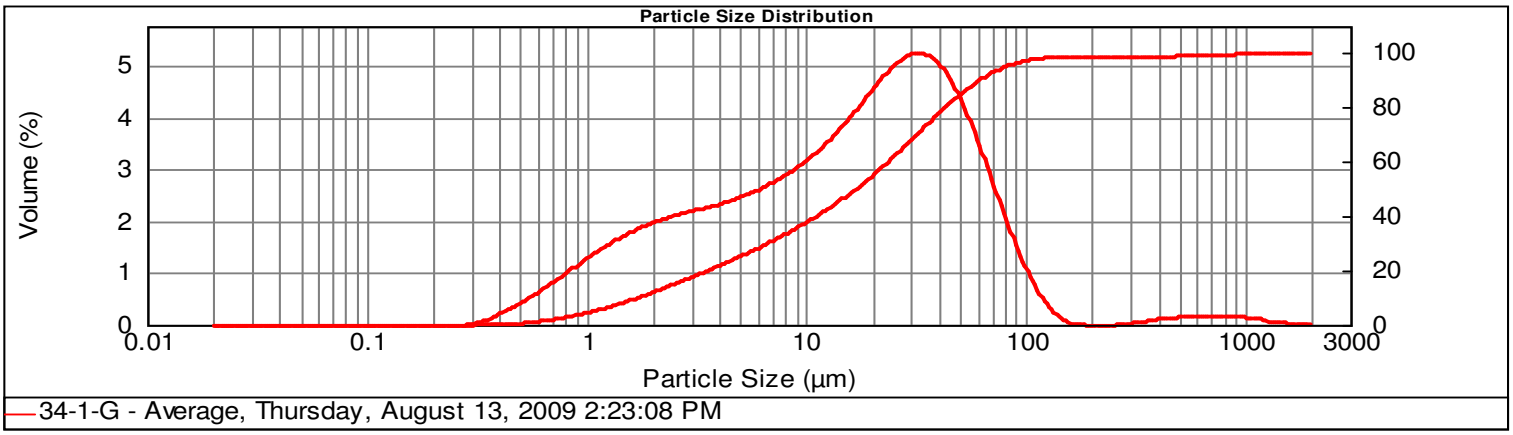
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.26 phi (Silt)

USGS
% Clay (0-2 um) = 11.95
% Fine Silt (2-3.9 um) = 9.41

d (0.1) : 1.712 **um**
d (0.5) : 16.768 **d (0.9) : 61.014**

Wentworth
% Clay (0-3.9 um) = 21.36
% Silt (3.91-31 um) = 47.85
% Coarse Silt (31 - 62.5 um) = 21.33
% Very Fine sand (62.5 - 125 um) = 7.79

% Fine sand (125-250 um) = .3
% Medium sand (250-500 um) = .33
% Coarse sand (500-1000 um) = .76
% Very Coarse sand (1000 - 2000 um) = .29



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.06	100
-0.5	(1414.21)	0.0	(1000.00)	0.23	99.94
0.0	(1000.00)	0.5	(707.10)	0.38	99.71
0.5	(707.10)	1.0	(500.00)	0.38	99.34
1.0	(500.00)	1.5	(353.55)	0.27	98.96
1.5	(353.55)	2.0	(250.00)	0.07	98.69
2.0	(250.00)	2.5	(176.78)	0	98.62
2.5	(176.78)	3.0	(125.00)	0.3	98.62
3.0	(125.00)	3.5	(88.39)	2.14	98.33
3.5	(88.39)	4.0	(62.50)	5.65	96.19
4.0	(62.50)	4.5	(44.19)	9.44	90.54
4.5	(44.19)	5.0	(31.25)	11.61	81.1
5.0	(31.25)	5.5	(22.10)	11.46	69.49
5.5	(22.10)	6.0	(15.63)	9.9	58.03
6.0	(15.63)	6.5	(11.05)	8.22	48.13
6.5	(11.05)	7.0	(7.81)	6.96	39.91
7.0	(7.81)	7.5	(5.52)	6.08	32.95
7.5	(5.52)	8.0	(3.90)	5.48	26.86
8.0	(3.90)	8.5	(2.76)	5.07	21.39
8.5	(2.76)	9.0	(1.95)	4.67	16.32
9.0	(1.95)	9.5	(1.38)	4.11	11.65
9.5	(1.38)	10.0	(0.98)	3.3	7.53
10.0	(0.98)	10.5	(0.69)	2.32	4.23
10.5	(0.69)	11.0	(0.49)	1.34	1.91
11.0	(0.49)	11.5	(0.35)	0.53	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-H - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 3:27:28 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.61

D[4,3] = 22.39um = 5.48phi
D[v,0.05] = 1.06um = 9.88phi
D[v,0.16] = 2.62um = 8.58phi

D[v,0.5] = 15.54um = 6.01phi
D[v,0.84] = 43.53um = 4.52phi
D[v,0.95] = 67.61um = 3.89phi

Kurtosis = 1.97
Skewness = 1.41
Standard Deviation = 22.13 um = 5.5phi

Inclusive SD (Sorting Coeff.) = 1.92 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

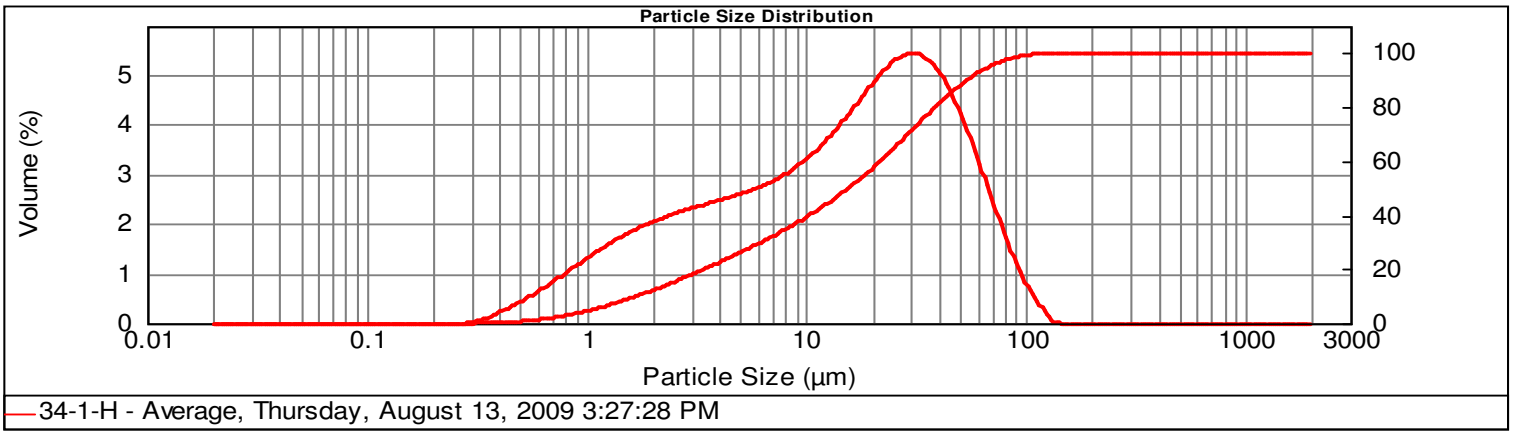
Inclusive Skewness = -0.28 (Coarse Skewed)
Inclusive Mean = 6.37 phi (Silt)

USGS
% Clay (0-2 um) = 12.21
% Fine Silt (2-3.9 um) = 9.89

d (0.1) : 1.684 **um**
d (0.5) : 15.540 **d (0.9) : 53.638**

Wentworth
% Clay (0-3.9 um) = 22.1
% Silt (3.91-31 um) = 50.31
% Coarse Silt (31 - 62.5 um) = 21.1
% Very Fine sand (62.5 - 125 um) = 6.45

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.03	100
3.0	(125.00)	3.5	(88.39)	1.52	99.97
3.5	(88.39)	4.0	(62.50)	4.93	98.45
4.0	(62.50)	4.5	(44.19)	9.04	93.52
4.5	(44.19)	5.0	(31.25)	11.78	84.48
5.0	(31.25)	5.5	(22.10)	12.03	72.7
5.5	(22.10)	6.0	(15.63)	10.51	60.66
6.0	(15.63)	6.5	(11.05)	8.65	50.15
6.5	(11.05)	7.0	(7.81)	7.23	41.5
7.0	(7.81)	7.5	(5.52)	6.35	34.27
7.5	(5.52)	8.0	(3.90)	5.79	27.92
8.0	(3.90)	8.5	(2.76)	5.36	22.13
8.5	(2.76)	9.0	(1.95)	4.87	16.77
9.0	(1.95)	9.5	(1.38)	4.23	11.9
9.5	(1.38)	10.0	(0.98)	3.37	7.67
10.0	(0.98)	10.5	(0.69)	2.36	4.3
10.5	(0.69)	11.0	(0.49)	1.36	1.94
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-I - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 3:33:54 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 11.45

D[4,3] = 25.4um = 5.3phi
D[v,0.05] = 1.08um = 9.85phi
D[v,0.16] = 2.7um = 8.53phi

D[v,0.5] = 16.14um = 5.95phi
D[v,0.84] = 46.39um = 4.43phi
D[v,0.95] = 72.67um = 3.78phi

Kurtosis = 278.35
Skewness = 13.81
Standard Deviation = 44.2 um = 4.5phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

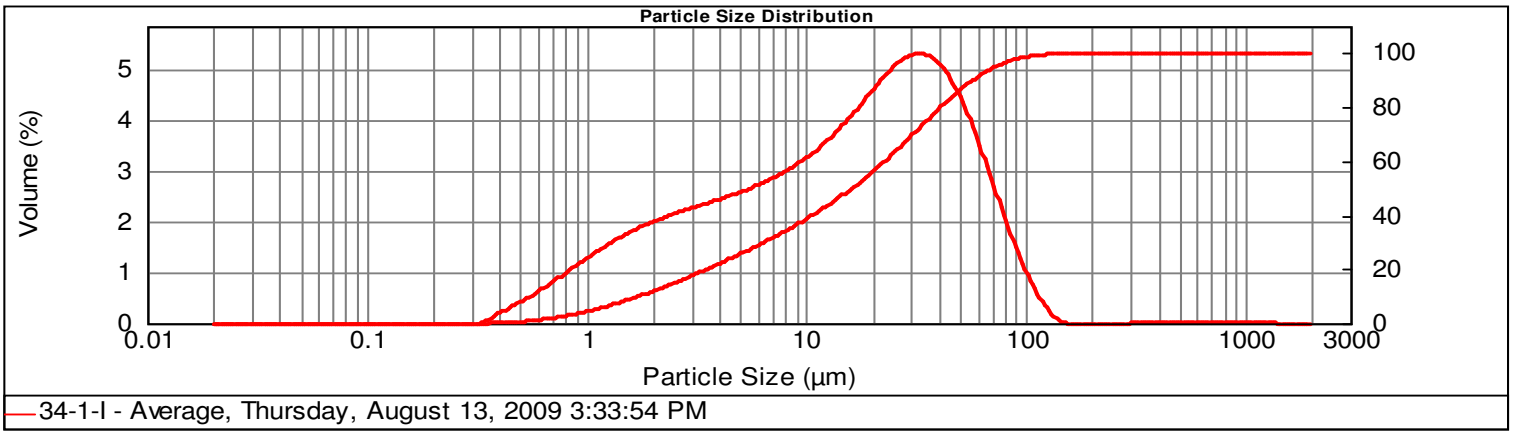
Inclusive Skewness = -0.27 (Coarse Skewed)
Inclusive Mean = 6.3 phi (Silt)

USGS
% Clay (0-2 um) = 11.85
% Fine Silt (2-3.9 um) = 9.67

d (0.1) : 1.727 **um**
d (0.5) : 16.143 **d (0.9) : 57.361**

Wentworth
% Clay (0-3.9 um) = 21.53
% Silt (3.91-31 um) = 48.89
% Coarse Silt (31 - 62.5 um) = 21.62
% Very Fine sand (62.5 - 125 um) = 7.56

% Fine sand (125-250 um) = .12
% Medium sand (250-500 um) = .09
% Coarse sand (500-1000 um) = .16
% Very Coarse sand (1000 - 2000 um) = .04



Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.04	100
0.0	(1000.00)	0.5	(707.10)	0.08	99.96
0.5	(707.10)	1.0	(500.00)	0.08	99.88
1.0	(500.00)	1.5	(353.55)	0.07	99.8
1.5	(353.55)	2.0	(250.00)	0.01	99.73
2.0	(250.00)	2.5	(176.78)	0	99.72
2.5	(176.78)	3.0	(125.00)	0.12	99.72
3.0	(125.00)	3.5	(88.39)	1.94	99.6
3.5	(88.39)	4.0	(62.50)	5.61	97.65
4.0	(62.50)	4.5	(44.19)	9.57	92.04
4.5	(44.19)	5.0	(31.25)	11.77	82.47
5.0	(31.25)	5.5	(22.10)	11.56	70.7
5.5	(22.10)	6.0	(15.63)	10	59.13
6.0	(15.63)	6.5	(11.05)	8.36	49.14
6.5	(11.05)	7.0	(7.81)	7.16	40.77
7.0	(7.81)	7.5	(5.52)	6.33	33.61
7.5	(5.52)	8.0	(3.90)	5.73	27.28

Size Hi		Size Lo		% In	% Below
phi	um	phi	um		
8.0	(3.90)	8.5	(2.76)	5.25	21.55
8.5	(2.76)	9.0	(1.95)	4.76	16.3
9.0	(1.95)	9.5	(1.38)	4.13	11.55
9.5	(1.38)	10.0	(0.98)	3.29	7.42
10.0	(0.98)	10.5	(0.69)	2.3	4.12
10.5	(0.69)	11.0	(0.49)	1.32	1.82
11.0	(0.49)	11.5	(0.35)	0.49	0.49
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-J - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 3:40:06 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.97

D[4,3] = 64.51um = 3.95phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.59um = 8.59phi

D[v,0.5] = 15.87um = 5.98phi
D[v,0.84] = 50.42um = 4.31phi
D[v,0.95] = 102.33um = 3.29phi

Kurtosis = 29.9
Skewness = 5.39
Standard Deviation = 217.32 um = 2.2phi

Inclusive SD (Sorting Coeff.) = 2.07 phi (Very Poorly Sorted)
Inclusive Kurtosis = .91 phi (Mesokurtic)

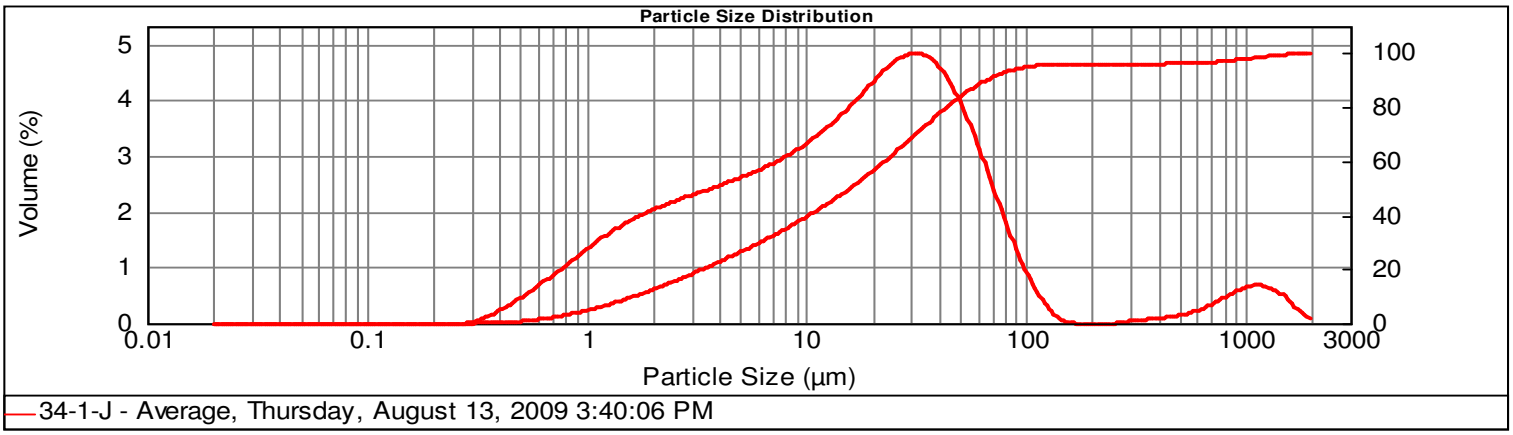
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.29 phi (Silt)

USGS
% Clay (0-2 um) = 12.43
% Fine Silt (2-3.9 um) = 9.8

d (0.1) : 1.655 **um**
d (0.5) : 15.867 **d (0.9) : 66.120**

Wentworth
% Clay (0-3.9 um) = 22.23
% Silt (3.91-31 um) = 47.27
% Coarse Silt (31 - 62.5 um) = 19.43
% Very Fine sand (62.5 - 125 um) = 6.78

% Fine sand (125-250 um) = .17
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = 1.64
% Very Coarse sand (1000 - 2000 um) = 2.17



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.7	100
-0.5	(1414.21)	0.0	(1000.00)	1.47	99.3
0.0	(1000.00)	0.5	(707.10)	1.14	97.83
0.5	(707.10)	1.0	(500.00)	0.5	96.69
1.0	(500.00)	1.5	(353.55)	0.22	96.18
1.5	(353.55)	2.0	(250.00)	0.08	95.96
2.0	(250.00)	2.5	(176.78)	0	95.88
2.5	(176.78)	3.0	(125.00)	0.17	95.88
3.0	(125.00)	3.5	(88.39)	1.78	95.71
3.5	(88.39)	4.0	(62.50)	5	93.93
4.0	(62.50)	4.5	(44.19)	8.53	88.93
4.5	(44.19)	5.0	(31.25)	10.64	80.4
5.0	(31.25)	5.5	(22.10)	10.68	69.75
5.5	(22.10)	6.0	(15.63)	9.47	59.08
6.0	(15.63)	6.5	(11.05)	8.12	49.61
6.5	(11.05)	7.0	(7.81)	7.1	41.49
7.0	(7.81)	7.5	(5.52)	6.36	34.4
7.5	(5.52)	8.0	(3.90)	5.79	28.04

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.31	22.25
8.5	(2.76)	9.0	(1.95)	4.83	16.94
9.0	(1.95)	9.5	(1.38)	4.23	12.11
9.5	(1.38)	10.0	(0.98)	3.42	7.88
10.0	(0.98)	10.5	(0.69)	2.42	4.46
10.5	(0.69)	11.0	(0.49)	1.42	2.04
11.0	(0.49)	11.5	(0.35)	0.57	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-K - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 3:44:12 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 14.87

D[4,3] = 71.29um = 3.81phi
D[v,0.05] = .94um = 10.05phi
D[v,0.16] = 2.23um = 8.81phi

D[v,0.5] = 13.37um = 6.23phi
D[v,0.84] = 48.86um = 4.36phi
D[v,0.95] = 495.06um = 1.01phi

Kurtosis = 23.55
Skewness = 4.77
Standard Deviation = 230.38 um = 2.12phi

Inclusive SD (Sorting Coeff.) = 2.48 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.18 phi (Leptokurtic)

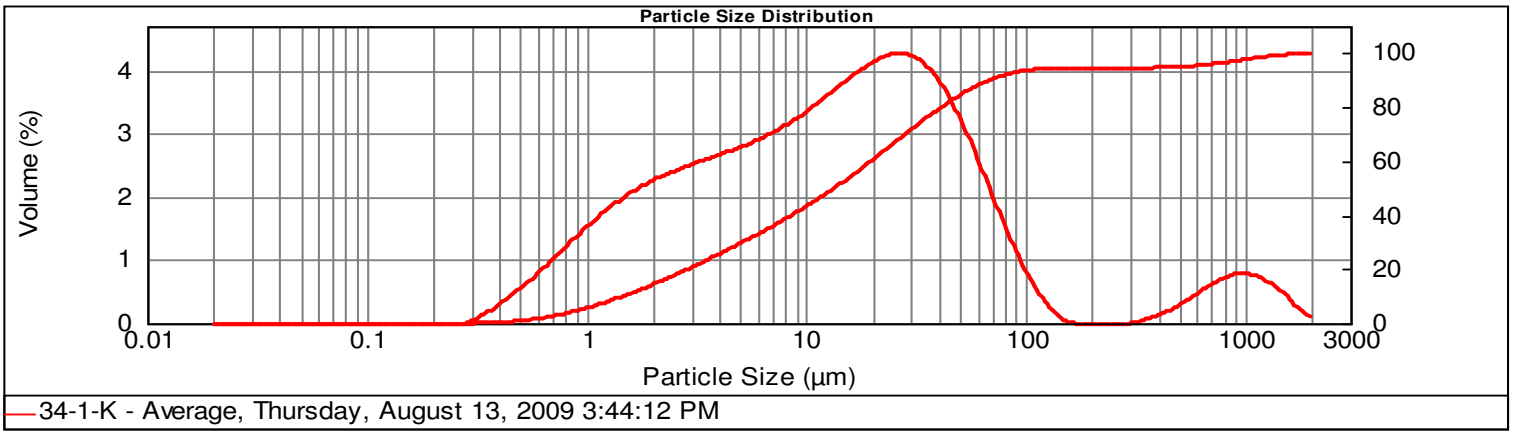
Inclusive Skewness = 0 (Near Symmetrical)
Inclusive Mean = 6.46 phi (Silt)

USGS
% Clay (0-2 um) = 14.34
% Fine Silt (2-3.9 um) = 10.79

d (0.1) : 1.465 **um**
d (0.5) : 13.367 **d (0.9) : 68.188**

Wentworth
% Clay (0-3.9 um) = 25.13
% Silt (3.91-31 um) = 47.36
% Coarse Silt (31 - 62.5 um) = 16.2
% Very Fine sand (62.5 - 125 um) = 5.74

% Fine sand (125-250 um) = .2
% Medium sand (250-500 um) = .4
% Coarse sand (500-1000 um) = 2.72
% Very Coarse sand (1000 - 2000 um) = 2.26



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.69	100
-0.5	(1414.21)	0.0	(1000.00)	1.58	99.31
0.0	(1000.00)	0.5	(707.10)	1.68	97.74
0.5	(707.10)	1.0	(500.00)	1.04	96.06
1.0	(500.00)	1.5	(353.55)	0.37	95.02
1.5	(353.55)	2.0	(250.00)	0.03	94.64
2.0	(250.00)	2.5	(176.78)	0	94.62
2.5	(176.78)	3.0	(125.00)	0.2	94.62
3.0	(125.00)	3.5	(88.39)	1.6	94.42
3.5	(88.39)	4.0	(62.50)	4.14	92.82
4.0	(62.50)	4.5	(44.19)	6.97	88.69
4.5	(44.19)	5.0	(31.25)	9.01	81.72
5.0	(31.25)	5.5	(22.10)	9.66	72.71
5.5	(22.10)	6.0	(15.63)	9.2	63.05
6.0	(15.63)	6.5	(11.05)	8.3	53.85
6.5	(11.05)	7.0	(7.81)	7.43	45.56
7.0	(7.81)	7.5	(5.52)	6.74	38.13
7.5	(5.52)	8.0	(3.90)	6.23	31.39

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.81	25.16
8.5	(2.76)	9.0	(1.95)	5.36	19.34
9.0	(1.95)	9.5	(1.38)	4.74	13.99
9.5	(1.38)	10.0	(0.98)	3.88	9.24
10.0	(0.98)	10.5	(0.69)	2.82	5.36
10.5	(0.69)	11.0	(0.49)	1.71	2.55
11.0	(0.49)	11.5	(0.35)	0.75	0.84
11.5	(0.35)	12.0	(0.24)	0.09	0.09
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-L - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 3:50:26 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.03

D[4,3] = 39.71um = 4.65phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.54um = 8.62phi

D[v,0.5] = 14.33um = 6.12phi
D[v,0.84] = 42.36um = 4.56phi
D[v,0.95] = 71.24um = 3.81phi

Kurtosis = 73.5
Skewness = 8.26
Standard Deviation = 149.33 um = 2.74phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

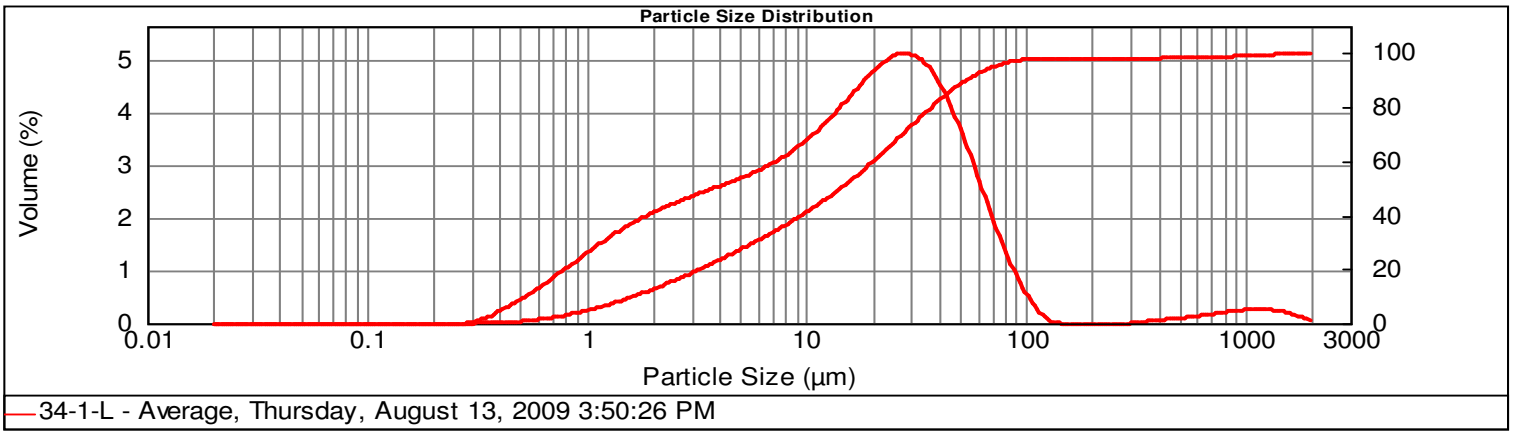
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.44 phi (Silt)

USGS
% Clay (0-2 um) = 12.57
% Fine Silt (2-3.9 um) = 10.3

d (0.1) : 1.646 **um**
d (0.5) : 14.332 **d (0.9) : 53.486**

Wentworth
% Clay (0-3.9 um) = 22.87
% Silt (3.91-31 um) = 51.27
% Coarse Silt (31 - 62.5 um) = 18.93
% Very Fine sand (62.5 - 125 um) = 5.03

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .16
% Coarse sand (500-1000 um) = .8
% Very Coarse sand (1000 - 2000 um) = .94



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.36	100
-0.5	(1414.21)	0.0	(1000.00)	0.58	99.64
0.0	(1000.00)	0.5	(707.10)	0.5	99.06
0.5	(707.10)	1.0	(500.00)	0.3	98.56
1.0	(500.00)	1.5	(353.55)	0.15	98.27
1.5	(353.55)	2.0	(250.00)	0.01	98.12
2.0	(250.00)	2.5	(176.78)	0	98.1
2.5	(176.78)	3.0	(125.00)	0.02	98.1
3.0	(125.00)	3.5	(88.39)	1.05	98.09
3.5	(88.39)	4.0	(62.50)	3.97	97.03
4.0	(62.50)	4.5	(44.19)	7.86	93.06
4.5	(44.19)	5.0	(31.25)	10.8	85.2
5.0	(31.25)	5.5	(22.10)	11.53	74.4
5.5	(22.10)	6.0	(15.63)	10.5	62.87
6.0	(15.63)	6.5	(11.05)	8.94	52.37
6.5	(11.05)	7.0	(7.81)	7.65	43.43
7.0	(7.81)	7.5	(5.52)	6.76	35.78
7.5	(5.52)	8.0	(3.90)	6.13	29.02

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.6	22.89
8.5	(2.76)	9.0	(1.95)	5.04	17.29
9.0	(1.95)	9.5	(1.38)	4.34	12.25
9.5	(1.38)	10.0	(0.98)	3.45	7.9
10.0	(0.98)	10.5	(0.69)	2.42	4.45
10.5	(0.69)	11.0	(0.49)	1.41	2.03
11.0	(0.49)	11.5	(0.35)	0.56	0.62
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 34-1-M - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Thursday, August 13, 2009 3:55:11 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.03

D[4,3] = 37.97um = 4.72phi
D[v,0.05] = 1.02um = 9.94phi
D[v,0.16] = 2.43um = 8.69phi

D[v,0.5] = 13.3um = 6.23phi
D[v,0.84] = 41.48um = 4.59phi
D[v,0.95] = 72.17um = 3.79phi

Kurtosis = 77.4
Skewness = 8.4
Standard Deviation = 140.75 um = 2.83phi

Inclusive SD (Sorting Coeff.) = 1.96 phi (Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

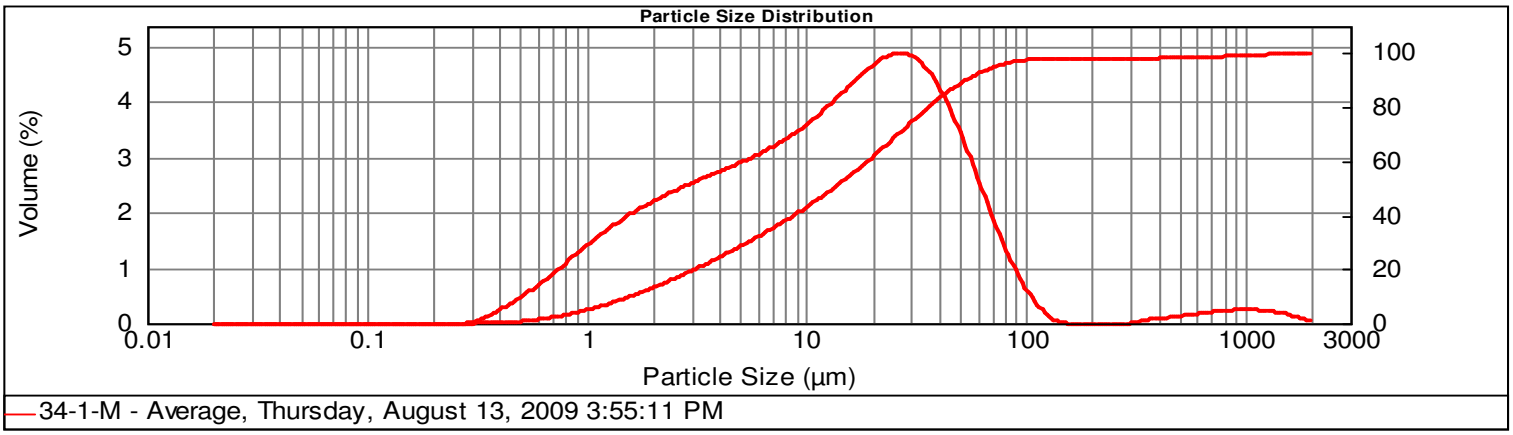
Inclusive Skewness = -0.2 (Coarse Skewed)
Inclusive Mean = 6.5 phi (Silt)

USGS
% Clay (0-2 um) = 13.11
% Fine Silt (2-3.9 um) = 10.76

d (0.1) : 1.592 **um**
d (0.5) : 13.304 **d (0.9) : 53.127**

Wentworth
% Clay (0-3.9 um) = 23.88
% Silt (3.91-31 um) = 51.48
% Coarse Silt (31 - 62.5 um) = 17.65
% Very Fine sand (62.5 - 125 um) = 5.01

% Fine sand (125-250 um) = .06
% Medium sand (250-500 um) = .24
% Coarse sand (500-1000 um) = .89
% Very Coarse sand (1000 - 2000 um) = .79



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.28	100
-0.5	(1414.21)	0.0	(1000.00)	0.51	99.72
0.0	(1000.00)	0.5	(707.10)	0.52	99.21
0.5	(707.10)	1.0	(500.00)	0.37	98.69
1.0	(500.00)	1.5	(353.55)	0.21	98.31
1.5	(353.55)	2.0	(250.00)	0.03	98.1
2.0	(250.00)	2.5	(176.78)	0	98.08
2.5	(176.78)	3.0	(125.00)	0.06	98.08
3.0	(125.00)	3.5	(88.39)	1.18	98.01
3.5	(88.39)	4.0	(62.50)	3.84	96.84
4.0	(62.50)	4.5	(44.19)	7.32	93
4.5	(44.19)	5.0	(31.25)	10.07	85.68
5.0	(31.25)	5.5	(22.10)	10.97	75.61
5.5	(22.10)	6.0	(15.63)	10.29	64.64
6.0	(15.63)	6.5	(11.05)	9.04	54.35
6.5	(11.05)	7.0	(7.81)	7.91	45.31
7.0	(7.81)	7.5	(5.52)	7.07	37.4
7.5	(5.52)	8.0	(3.90)	6.43	30.34

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.87	23.91
8.5	(2.76)	9.0	(1.95)	5.26	18.04
9.0	(1.95)	9.5	(1.38)	4.53	12.77
9.5	(1.38)	10.0	(0.98)	3.61	8.24
10.0	(0.98)	10.5	(0.69)	2.53	4.64
10.5	(0.69)	11.0	(0.49)	1.47	2.11
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 35-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 12:20:38 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 17.99

D[4,3] = 89.47um = 3.48phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.68um = 8.54phi

D[v,0.5] = 14.89um = 6.07phi
D[v,0.84] = 73.94um = 3.76phi
D[v,0.95] = 567.66um = .82phi

Kurtosis = 19.52
Skewness = 4.23
Standard Deviation = 238.95 um = 2.07phi

Inclusive SD (Sorting Coeff.) = 2.57 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.15 phi (Leptokurtic)

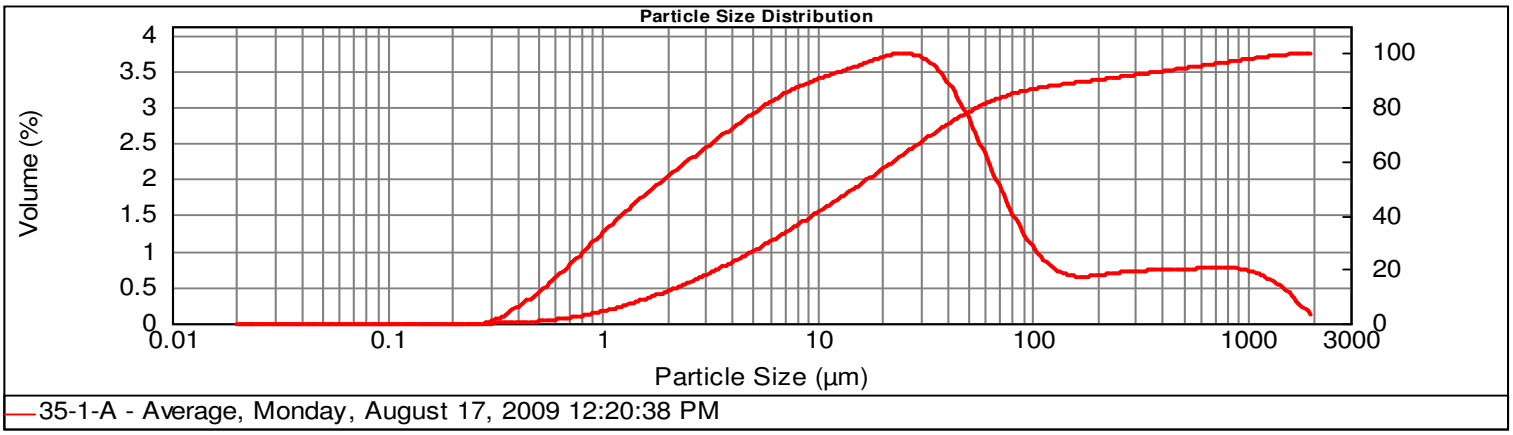
Inclusive Skewness = .06 (Near Symmetrical)
Inclusive Mean = 6.12 phi (Silt)

USGS
% Clay (0-2 um) = 11.84
% Fine Silt (2-3.9 um) = 10.26

d (0.1) : 1.732 **um**
d (0.5) : 14.888 **d (0.9) : 195.987**

Wentworth
% Clay (0-3.9 um) = 22.1
% Silt (3.91-31 um) = 45.55
% Coarse Silt (31 - 62.5 um) = 14.17
% Very Fine sand (62.5 - 125 um) = 6.21

% Fine sand (125-250 um) = 3.05
% Medium sand (250-500 um) = 3.3
% Coarse sand (500-1000 um) = 3.44
% Very Coarse sand (1000 - 2000 um) = 2.18



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.73	100
-0.5	(1414.21)	0.0	(1000.00)	1.46	99.27
0.0	(1000.00)	0.5	(707.10)	1.72	97.82
0.5	(707.10)	1.0	(500.00)	1.72	96.09
1.0	(500.00)	1.5	(353.55)	1.67	94.38
1.5	(353.55)	2.0	(250.00)	1.63	92.71
2.0	(250.00)	2.5	(176.78)	1.52	91.08
2.5	(176.78)	3.0	(125.00)	1.53	89.56
3.0	(125.00)	3.5	(88.39)	2.25	88.03
3.5	(88.39)	4.0	(62.50)	3.95	85.77
4.0	(62.50)	4.5	(44.19)	6.14	81.82
4.5	(44.19)	5.0	(31.25)	7.84	75.67
5.0	(31.25)	5.5	(22.10)	8.44	67.84
5.5	(22.10)	6.0	(15.63)	8.27	59.4
6.0	(15.63)	6.5	(11.05)	7.92	51.13
6.5	(11.05)	7.0	(7.81)	7.57	43.2
7.0	(7.81)	7.5	(5.52)	7.09	35.63
7.5	(5.52)	8.0	(3.90)	6.42	28.55

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.68	22.12
8.5	(2.76)	9.0	(1.95)	4.92	16.44
9.0	(1.95)	9.5	(1.38)	4.12	11.52
9.5	(1.38)	10.0	(0.98)	3.23	7.4
10.0	(0.98)	10.5	(0.69)	2.26	4.17
10.5	(0.69)	11.0	(0.49)	1.32	1.91
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 35-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 12:49:16 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.99

D[4,3] = 80.91um = 3.63phi
D[v,0.05] = 1.09um = 9.85phi
D[v,0.16] = 2.73um = 8.52phi

D[v,0.5] = 14.85um = 6.07phi
D[v,0.84] = 58.39um = 4.1phi
D[v,0.95] = 551.33um = .86phi

Kurtosis = 21.65
Skewness = 4.54
Standard Deviation = 239.55 um = 2.06phi

Inclusive SD (Sorting Coeff.) = 2.47 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.21 phi (Leptokurtic)

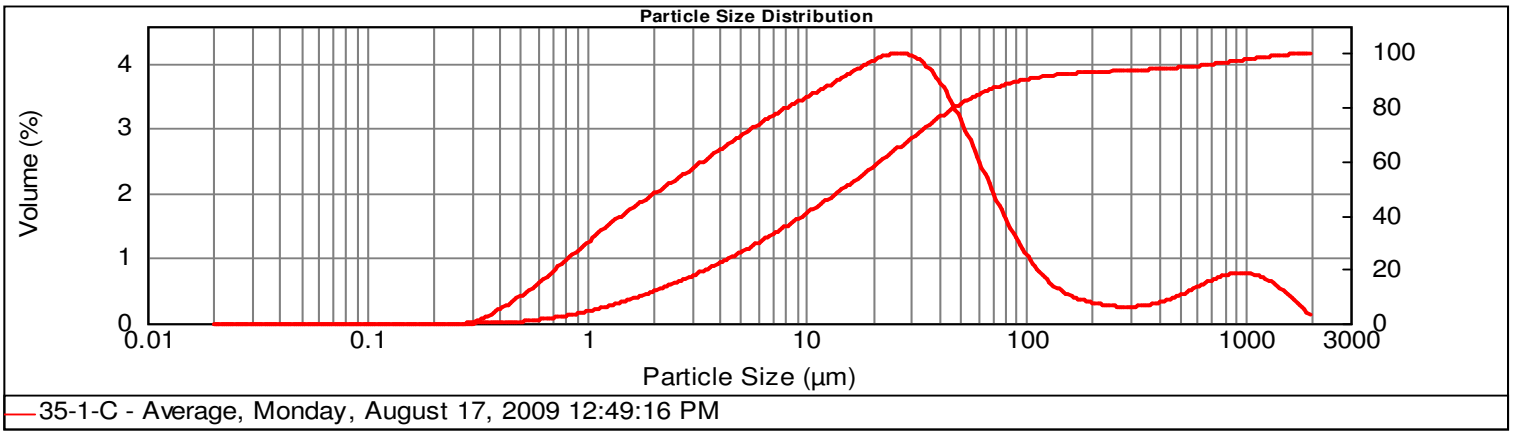
Inclusive Skewness = .03 (Near Symmetrical)
Inclusive Mean = 6.23 phi (Silt)

USGS
% Clay (0-2 um) = 11.67
% Fine Silt (2-3.9 um) = 10.04

d (0.1) : 1.751 **um**
d (0.5) : 14.851 **d (0.9) : 95.572**

Wentworth
% Clay (0-3.9 um) = 21.7
% Silt (3.91-31 um) = 47.72
% Coarse Silt (31 - 62.5 um) = 15.7
% Very Fine sand (62.5 - 125 um) = 6.43

% Fine sand (125-250 um) = 1.79
% Medium sand (250-500 um) = 1.36
% Coarse sand (500-1000 um) = 2.92
% Very Coarse sand (1000 - 2000 um) = 2.37



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.8	100
-0.5	(1414.21)	0.0	(1000.00)	1.58	99.2
0.0	(1000.00)	0.5	(707.10)	1.68	97.63
0.5	(707.10)	1.0	(500.00)	1.24	95.95
1.0	(500.00)	1.5	(353.55)	0.77	94.7
1.5	(353.55)	2.0	(250.00)	0.58	93.93
2.0	(250.00)	2.5	(176.78)	0.69	93.35
2.5	(176.78)	3.0	(125.00)	1.1	92.66
3.0	(125.00)	3.5	(88.39)	2.2	91.56
3.5	(88.39)	4.0	(62.50)	4.23	89.36
4.0	(62.50)	4.5	(44.19)	6.76	85.13
4.5	(44.19)	5.0	(31.25)	8.73	78.36
5.0	(31.25)	5.5	(22.10)	9.37	69.64
5.5	(22.10)	6.0	(15.63)	9	60.27
6.0	(15.63)	6.5	(11.05)	8.35	51.27
6.5	(11.05)	7.0	(7.81)	7.74	42.91
7.0	(7.81)	7.5	(5.52)	7.09	35.17
7.5	(5.52)	8.0	(3.90)	6.34	28.08

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.56	21.73
8.5	(2.76)	9.0	(1.95)	4.81	16.17
9.0	(1.95)	9.5	(1.38)	4.05	11.36
9.5	(1.38)	10.0	(0.98)	3.19	7.32
10.0	(0.98)	10.5	(0.69)	2.24	4.12
10.5	(0.69)	11.0	(0.49)	1.31	1.88
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 35-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 12:53:41 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.37

D[4,3] = 21.54um = 5.54phi
D[v,0.05] = 1.06um = 9.89phi
D[v,0.16] = 2.63um = 8.57phi

D[v,0.5] = 14.33um = 6.13phi
D[v,0.84] = 41.99um = 4.57phi
D[v,0.95] = 66.56um = 3.91phi

Kurtosis = 2.32
Skewness = 1.51
Standard Deviation = 21.79 um = 5.52phi

Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

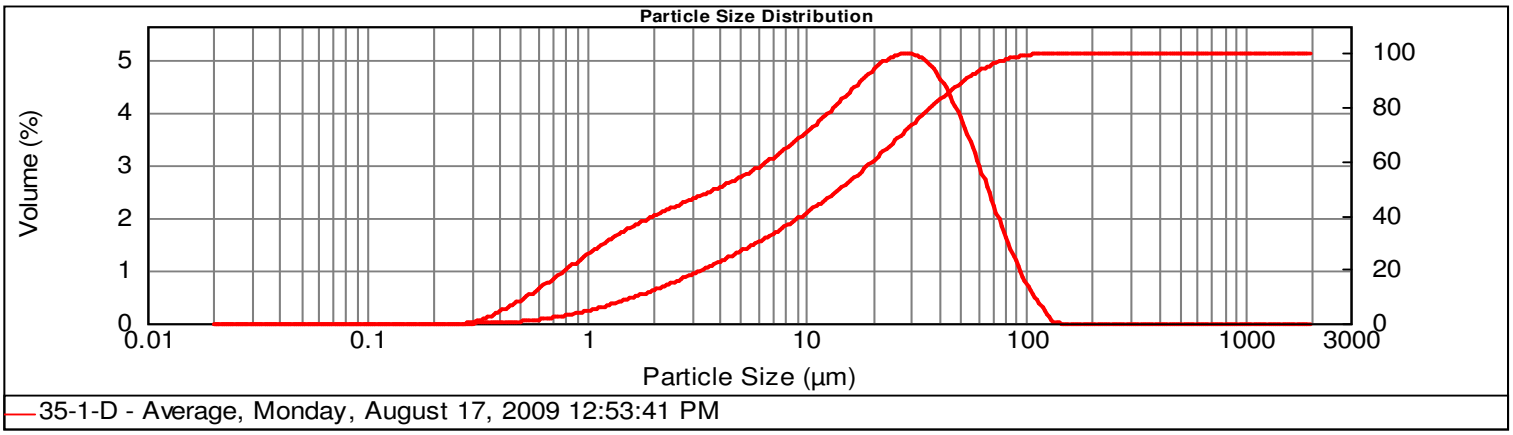
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.42 phi (Silt)

USGS
% Clay (0-2 um) = 12.16
% Fine Silt (2-3.9 um) = 10.01

d (0.1) : 1.689 **um**
d (0.5) : 14.327 **d (0.9) : 52.294**

Wentworth
% Clay (0-3.9 um) = 22.17
% Silt (3.91-31 um) = 52.1
% Coarse Silt (31 - 62.5 um) = 19.6
% Very Fine sand (62.5 - 125 um) = 6.1

% Fine sand (125-250 um) = .03
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.03	100
3.0	(125.00)	3.5	(88.39)	1.47	99.97
3.5	(88.39)	4.0	(62.50)	4.62	98.5
4.0	(62.50)	4.5	(44.19)	8.37	93.87
4.5	(44.19)	5.0	(31.25)	10.96	85.5
5.0	(31.25)	5.5	(22.10)	11.51	74.54
5.5	(22.10)	6.0	(15.63)	10.59	63.03
6.0	(15.63)	6.5	(11.05)	9.22	52.44
6.5	(11.05)	7.0	(7.81)	7.96	43.22
7.0	(7.81)	7.5	(5.52)	6.93	35.26
7.5	(5.52)	8.0	(3.90)	6.12	28.32
8.0	(3.90)	8.5	(2.76)	5.48	22.2
8.5	(2.76)	9.0	(1.95)	4.87	16.72
9.0	(1.95)	9.5	(1.38)	4.19	11.85
9.5	(1.38)	10.0	(0.98)	3.34	7.66
10.0	(0.98)	10.5	(0.69)	2.36	4.32
10.5	(0.69)	11.0	(0.49)	1.37	1.96
11.0	(0.49)	11.5	(0.35)	0.54	0.59
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 35-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured: Monday, August 17, 2009 12:58:42 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 13.07

D[4,3] = 23.93um = 5.39phi
D[v,0.05] = 1.05um = 9.9phi
D[v,0.16] = 2.61um = 8.58phi

D[v,0.5] = 14.5um = 6.11phi
D[v,0.84] = 41.19um = 4.6phi
D[v,0.95] = 64.36um = 3.96phi

Kurtosis = 303.85
Skewness = 15.79
Standard Deviation = 56.64 um = 4.14phi

Inclusive SD (Sorting Coeff.) = 1.9 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

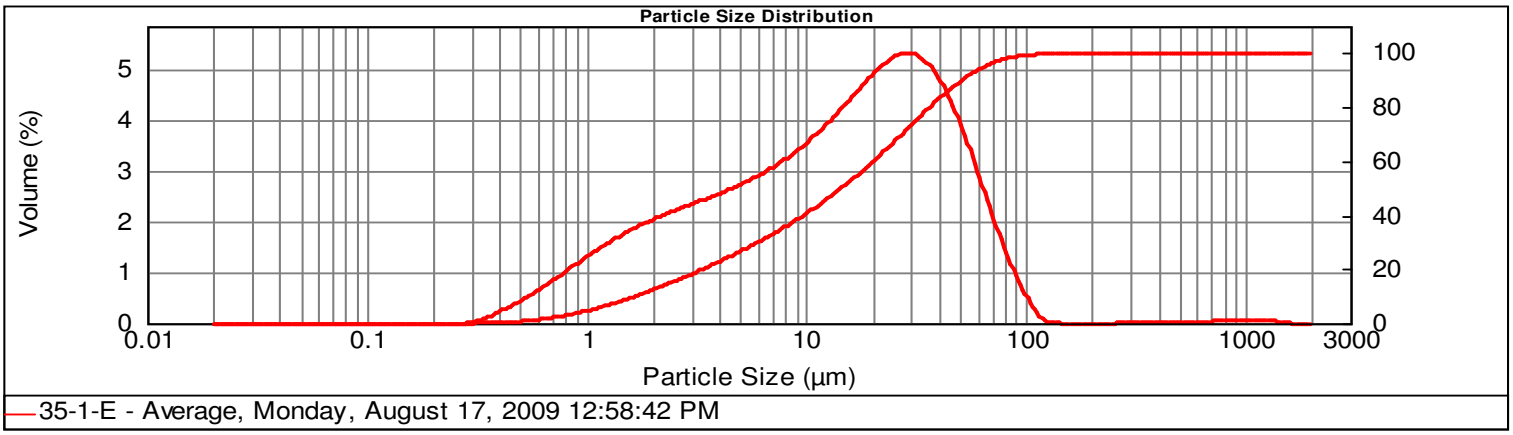
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.43 phi (Silt)

USGS
% Clay (0-2 um) = 12.29
% Fine Silt (2-3.9 um) = 10

d (0.1) : 1.674 **um**
d (0.5) : 14.496 **d (0.9) : 50.876**

Wentworth
% Clay (0-3.9 um) = 22.29
% Silt (3.91-31 um) = 52.24
% Coarse Silt (31 - 62.5 um) = 19.96
% Very Fine sand (62.5 - 125 um) = 5.14

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .08
% Coarse sand (500-1000 um) = .18
% Very Coarse sand (1000 - 2000 um) = .12



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.01	100
-0.5	(1414.21)	0.0	(1000.00)	0.11	99.99
0.0	(1000.00)	0.5	(707.10)	0.1	99.88
0.5	(707.10)	1.0	(500.00)	0.07	99.78
1.0	(500.00)	1.5	(353.55)	0.06	99.7
1.5	(353.55)	2.0	(250.00)	0.02	99.65
2.0	(250.00)	2.5	(176.78)	0	99.62
2.5	(176.78)	3.0	(125.00)	0	99.62
3.0	(125.00)	3.5	(88.39)	0.95	99.62
3.5	(88.39)	4.0	(62.50)	4.18	98.67
4.0	(62.50)	4.5	(44.19)	8.35	94.48
4.5	(44.19)	5.0	(31.25)	11.33	86.14
5.0	(31.25)	5.5	(22.10)	11.92	74.81
5.5	(22.10)	6.0	(15.63)	10.77	62.88
6.0	(15.63)	6.5	(11.05)	9.16	52.12
6.5	(11.05)	7.0	(7.81)	7.81	42.96
7.0	(7.81)	7.5	(5.52)	6.79	35.15
7.5	(5.52)	8.0	(3.90)	6.04	28.36

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.46	22.31
8.5	(2.76)	9.0	(1.95)	4.89	16.86
9.0	(1.95)	9.5	(1.38)	4.22	11.97
9.5	(1.38)	10.0	(0.98)	3.38	7.75
10.0	(0.98)	10.5	(0.69)	2.38	4.37
10.5	(0.69)	11.0	(0.49)	1.39	1.99
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 36-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:18:54 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 22.70

D[4,3] = 46.87um = 4.42phi
D[v,0.05] = .99um = 9.98phi
D[v,0.16] = 2.35um = 8.73phi

D[v,0.5] = 13.17um = 6.25phi
D[v,0.84] = 39.59um = 4.66phi
D[v,0.95] = 71.96um = 3.8phi

Kurtosis = 48.63
Skewness = 6.73
Standard Deviation = 175.24 um = 2.51phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

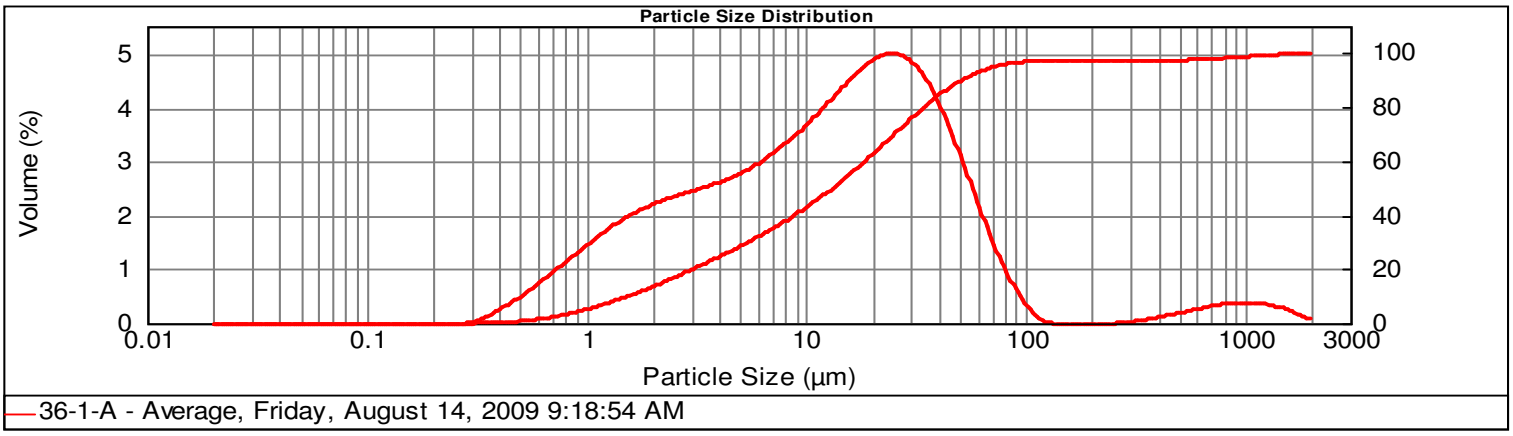
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.55 phi (Silt)

USGS
% Clay (0-2 um) = 13.58
% Fine Silt (2-3.9 um) = 10.55

d (0.1) : 1.542 **um**
d (0.5) : 13.166 **d (0.9) : 50.994**

Wentworth
% Clay (0-3.9 um) = 24.13
% Silt (3.91-31 um) = 52.63
% Coarse Silt (31 - 62.5 um) = 16.64
% Very Fine sand (62.5 - 125 um) = 3.6

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .34
% Coarse sand (500-1000 um) = 1.41
% Very Coarse sand (1000 - 2000 um) = 1.25



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.44	100
-0.5	(1414.21)	0.0	(1000.00)	0.81	99.56
0.0	(1000.00)	0.5	(707.10)	0.83	98.75
0.5	(707.10)	1.0	(500.00)	0.58	97.92
1.0	(500.00)	1.5	(353.55)	0.29	97.34
1.5	(353.55)	2.0	(250.00)	0.06	97.06
2.0	(250.00)	2.5	(176.78)	0	97
2.5	(176.78)	3.0	(125.00)	0	97
3.0	(125.00)	3.5	(88.39)	0.62	97
3.5	(88.39)	4.0	(62.50)	2.99	96.38
4.0	(62.50)	4.5	(44.19)	6.56	93.4
4.5	(44.19)	5.0	(31.25)	9.83	86.83
5.0	(31.25)	5.5	(22.10)	11.29	77.01
5.5	(22.10)	6.0	(15.63)	10.85	65.72
6.0	(15.63)	6.5	(11.05)	9.49	54.87
6.5	(11.05)	7.0	(7.81)	8.08	45.39
7.0	(7.81)	7.5	(5.52)	6.97	37.3
7.5	(5.52)	8.0	(3.90)	6.18	30.34

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.68	24.15
8.5	(2.76)	9.0	(1.95)	5.23	18.47
9.0	(1.95)	9.5	(1.38)	4.63	13.24
9.5	(1.38)	10.0	(0.98)	3.74	8.61
10.0	(0.98)	10.5	(0.69)	2.65	4.88
10.5	(0.69)	11.0	(0.49)	1.55	2.23
11.0	(0.49)	11.5	(0.35)	0.62	0.68
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 36-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:23:42 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 20.02

D[4,3] = 44.29um = 4.5phi
D[v,0.05] = 1.01um = 9.96phi
D[v,0.16] = 2.4um = 8.7phi

D[v,0.5] = 13.05um = 6.26phi
D[v,0.84] = 39.07um = 4.68phi
D[v,0.95] = 68.5um = 3.87phi

Kurtosis = 54.31
Skewness = 7.16
Standard Deviation = 172.61 um = 2.53phi

Inclusive SD (Sorting Coeff.) = 1.93 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

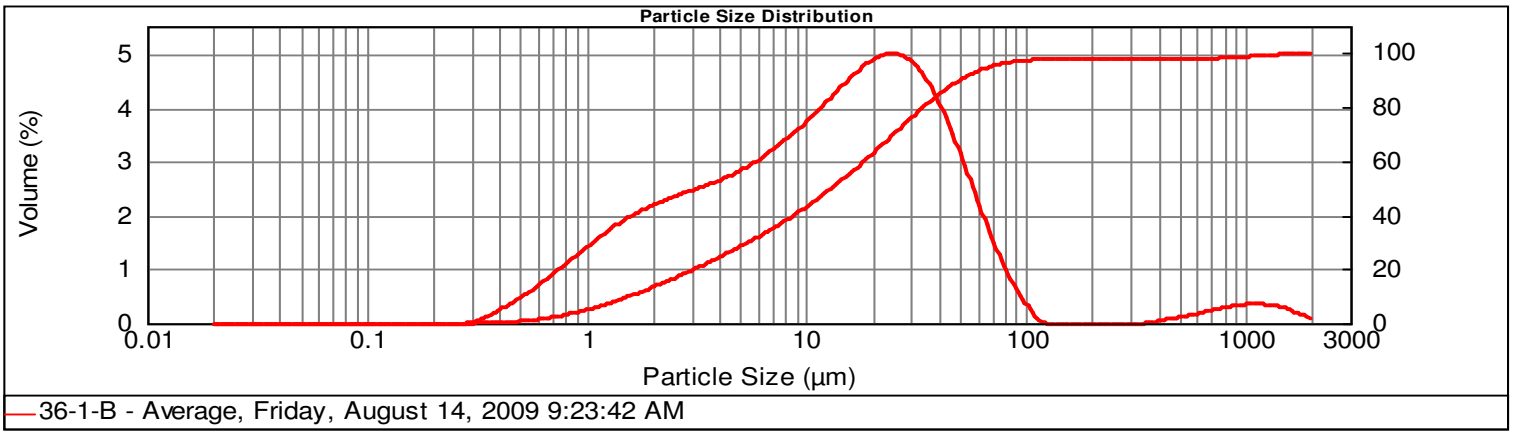
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.55 phi (Silt)

USGS
% Clay (0-2 um) = 13.32
% Fine Silt (2-3.9 um) = 10.58

d (0.1) : 1.569 **um**
d (0.5) : 13.048 **d (0.9) : 49.975**

Wentworth
% Clay (0-3.9 um) = 23.9
% Silt (3.91-31 um) = 53.19
% Coarse Silt (31 - 62.5 um) = 16.78
% Very Fine sand (62.5 - 125 um) = 3.66

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .12
% Coarse sand (500-1000 um) = 1.09
% Very Coarse sand (1000 - 2000 um) = 1.27



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.48	100
-0.5	(1414.21)	0.0	(1000.00)	0.79	99.52
0.0	(1000.00)	0.5	(707.10)	0.69	98.73
0.5	(707.10)	1.0	(500.00)	0.39	98.04
1.0	(500.00)	1.5	(353.55)	0.12	97.65
1.5	(353.55)	2.0	(250.00)	0	97.53
2.0	(250.00)	2.5	(176.78)	0	97.53
2.5	(176.78)	3.0	(125.00)	0	97.53
3.0	(125.00)	3.5	(88.39)	0.6	97.53
3.5	(88.39)	4.0	(62.50)	3.06	96.93
4.0	(62.50)	4.5	(44.19)	6.65	93.87
4.5	(44.19)	5.0	(31.25)	9.87	87.21
5.0	(31.25)	5.5	(22.10)	11.29	77.35
5.5	(22.10)	6.0	(15.63)	10.89	66.05
6.0	(15.63)	6.5	(11.05)	9.59	55.17
6.5	(11.05)	7.0	(7.81)	8.24	45.57
7.0	(7.81)	7.5	(5.52)	7.12	37.34
7.5	(5.52)	8.0	(3.90)	6.29	30.22

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.72	23.93
8.5	(2.76)	9.0	(1.95)	5.23	18.21
9.0	(1.95)	9.5	(1.38)	4.58	12.98
9.5	(1.38)	10.0	(0.98)	3.67	8.4
10.0	(0.98)	10.5	(0.69)	2.58	4.74
10.5	(0.69)	11.0	(0.49)	1.5	2.16
11.0	(0.49)	11.5	(0.35)	0.6	0.66
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 36-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:28:17 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.12

D[4,3] = 42.11um = 4.57phi
D[v,0.05] = 1um = 9.96phi
D[v,0.16] = 2.42um = 8.69phi

D[v,0.5] = 13.68um = 6.19phi
D[v,0.84] = 40.1um = 4.64phi
D[v,0.95] = 69.6um = 3.84phi

Kurtosis = 60.31
Skewness = 7.49
Standard Deviation = 159.89 um = 2.64phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .89 phi (Platykurtic)

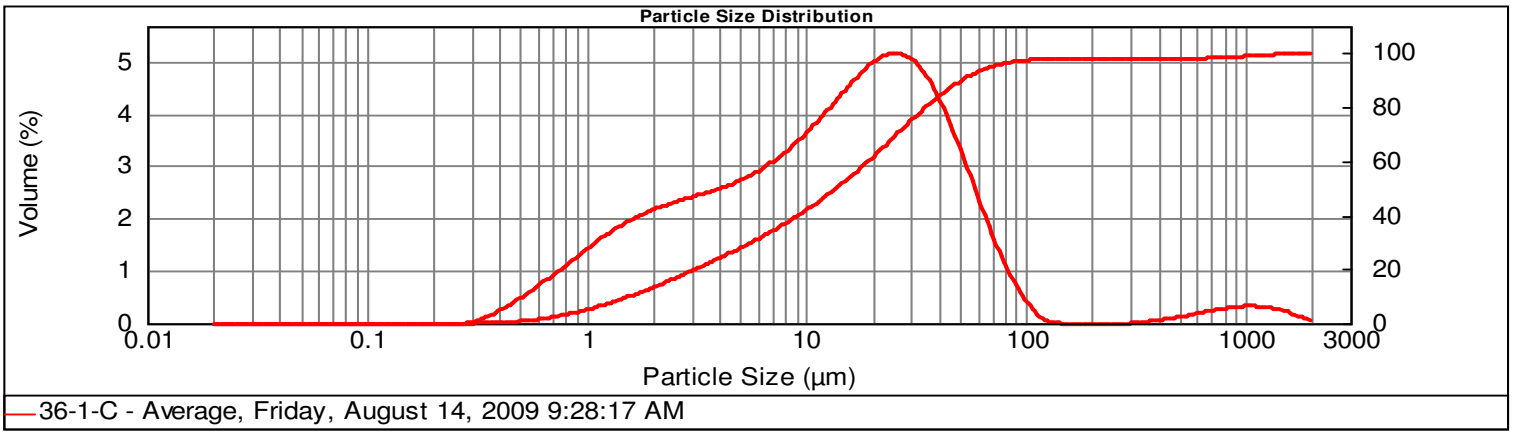
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.51 phi (Silt)

USGS
% Clay (0-2 um) = 13.25
% Fine Silt (2-3.9 um) = 10.31

d (0.1) : 1.572 **um**
d (0.5) : 13.681 **d (0.9) : 51.082**

Wentworth
% Clay (0-3.9 um) = 23.55
% Silt (3.91-31 um) = 52.55
% Coarse Silt (31 - 62.5 um) = 17.51
% Very Fine sand (62.5 - 125 um) = 4.08

% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .17
% Coarse sand (500-1000 um) = 1.07
% Very Coarse sand (1000 - 2000 um) = 1.07



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.37	100
-0.5	(1414.21)	0.0	(1000.00)	0.69	99.63
0.0	(1000.00)	0.5	(707.10)	0.66	98.93
0.5	(707.10)	1.0	(500.00)	0.41	98.27
1.0	(500.00)	1.5	(353.55)	0.16	97.86
1.5	(353.55)	2.0	(250.00)	0.01	97.7
2.0	(250.00)	2.5	(176.78)	0	97.69
2.5	(176.78)	3.0	(125.00)	0	97.69
3.0	(125.00)	3.5	(88.39)	0.77	97.69
3.5	(88.39)	4.0	(62.50)	3.31	96.91
4.0	(62.50)	4.5	(44.19)	7	93.61
4.5	(44.19)	5.0	(31.25)	10.25	86.61
5.0	(31.25)	5.5	(22.10)	11.58	76.36
5.5	(22.10)	6.0	(15.63)	10.96	64.77
6.0	(15.63)	6.5	(11.05)	9.44	53.81
6.5	(11.05)	7.0	(7.81)	7.94	44.37
7.0	(7.81)	7.5	(5.52)	6.81	36.43
7.5	(5.52)	8.0	(3.90)	6.05	29.62

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.55	23.58
8.5	(2.76)	9.0	(1.95)	5.11	18.02
9.0	(1.95)	9.5	(1.38)	4.51	12.91
9.5	(1.38)	10.0	(0.98)	3.64	8.4
10.0	(0.98)	10.5	(0.69)	2.58	4.76
10.5	(0.69)	11.0	(0.49)	1.51	2.18
11.0	(0.49)	11.5	(0.35)	0.61	0.67
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 36-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:32:50 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.88

D[4,3] = 45.58um = 4.46phi
D[v,0.05] = .96um = 10.03phi
D[v,0.16] = 2.19um = 8.84phi

D[v,0.5] = 11.54um = 6.44phi
D[v,0.84] = 36.22um = 4.79phi
D[v,0.95] = 67.61um = 3.89phi

Kurtosis = 47.15
Skewness = 6.63
Standard Deviation = 174.57 um = 2.52phi

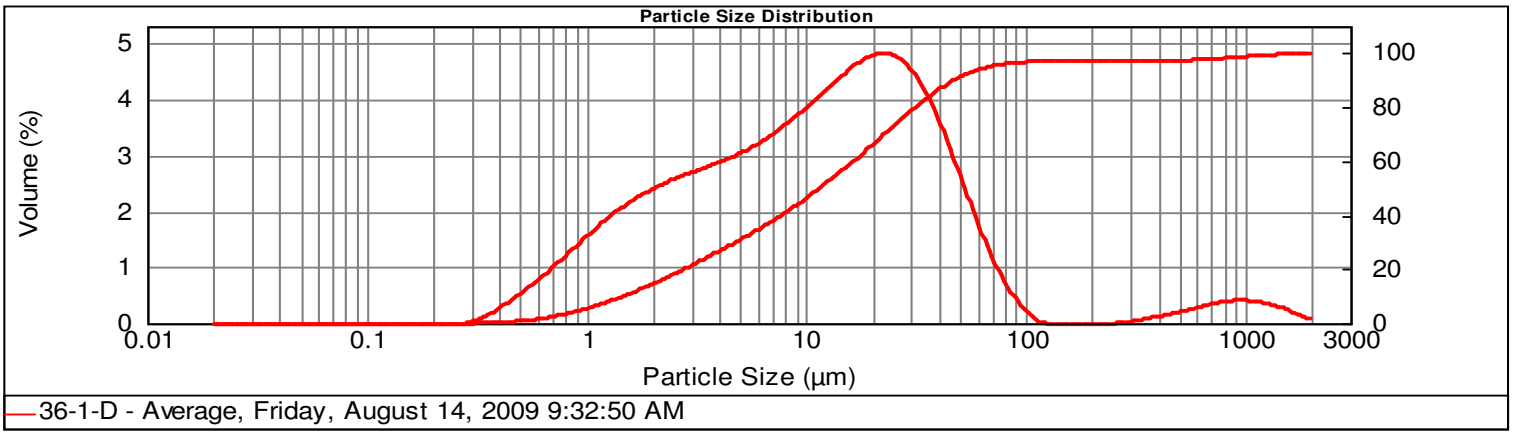
Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.69 phi (Silt)

USGS
% Clay (0-2 um) = 14.56
% Fine Silt (2-3.9 um) = 11.53

d (0.1) : 1.467 **um**
d (0.5) : 11.540 **d (0.9) : 47.046**

Wentworth
% Clay (0-3.9 um) = 26.09
% Silt (3.91-31 um) = 53.57
% Coarse Silt (31 - 62.5 um) = 14.58
% Very Fine sand (62.5 - 125 um) = 2.64
% Fine sand (125-250 um) = 0
% Medium sand (250-500 um) = .38
% Coarse sand (500-1000 um) = 1.51
% Very Coarse sand (1000 - 2000 um) = 1.23



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.41	100
-0.5	(1414.21)	0.0	(1000.00)	0.82	99.59
0.0	(1000.00)	0.5	(707.10)	0.89	98.77
0.5	(707.10)	1.0	(500.00)	0.63	97.89
1.0	(500.00)	1.5	(353.55)	0.31	97.26
1.5	(353.55)	2.0	(250.00)	0.07	96.95
2.0	(250.00)	2.5	(176.78)	0	96.88
2.5	(176.78)	3.0	(125.00)	0	96.88
3.0	(125.00)	3.5	(88.39)	0.38	96.88
3.5	(88.39)	4.0	(62.50)	2.26	96.5
4.0	(62.50)	4.5	(44.19)	5.5	94.24
4.5	(44.19)	5.0	(31.25)	8.84	88.74
5.0	(31.25)	5.5	(22.10)	10.68	79.9
5.5	(22.10)	6.0	(15.63)	10.69	69.21
6.0	(15.63)	6.5	(11.05)	9.67	58.52
6.5	(11.05)	7.0	(7.81)	8.49	48.85
7.0	(7.81)	7.5	(5.52)	7.49	40.37
7.5	(5.52)	8.0	(3.90)	6.75	32.88

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.23	26.12
8.5	(2.76)	9.0	(1.95)	5.71	19.9
9.0	(1.95)	9.5	(1.38)	4.99	14.19
9.5	(1.38)	10.0	(0.98)	4	9.2
10.0	(0.98)	10.5	(0.69)	2.82	5.19
10.5	(0.69)	11.0	(0.49)	1.64	2.37
11.0	(0.49)	11.5	(0.35)	0.66	0.73
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 36-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:37:25 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 19.19

D[4,3] = 41.65um = 4.59phi
D[v,0.05] = .98um = 10phi
D[v,0.16] = 2.24um = 8.8phi

D[v,0.5] = 11.69um = 6.42phi
D[v,0.84] = 37.54um = 4.74phi
D[v,0.95] = 69.94um = 3.84phi

Kurtosis = 56.83
Skewness = 7.22
Standard Deviation = 158.42 um = 2.66phi

Inclusive SD (Sorting Coeff.) = 1.95 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

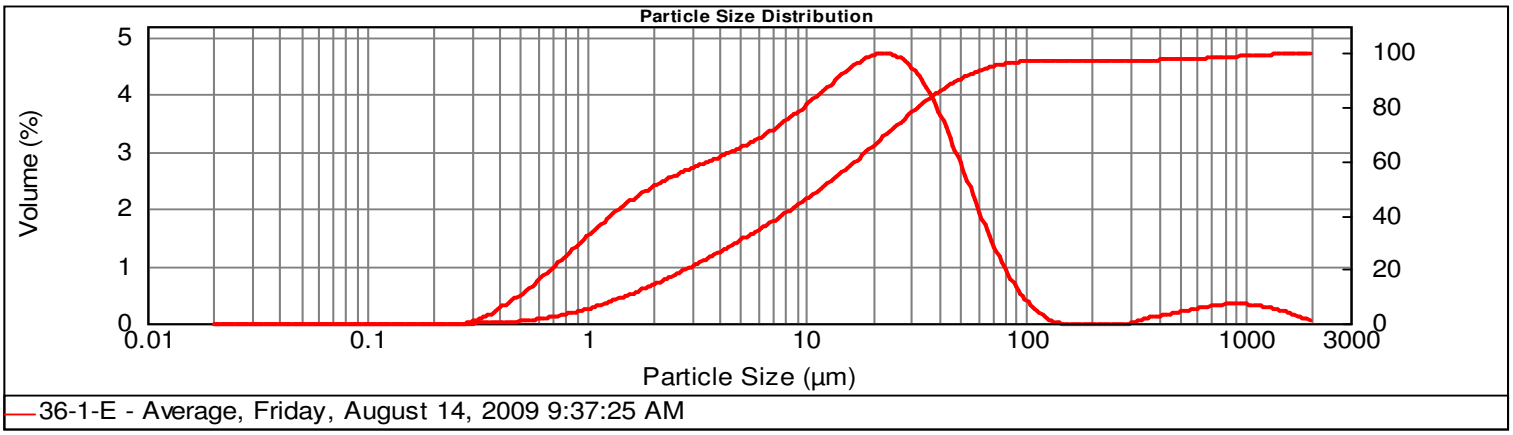
Inclusive Skewness = -0.17 (Coarse Skewed)
Inclusive Mean = 6.65 phi (Silt)

USGS
% Clay (0-2 um) = 14.19
% Fine Silt (2-3.9 um) = 11.57

d (0.1) : 1.501 **um**
d (0.5) : 11.687 **d (0.9) : 49.006**

Wentworth
% Clay (0-3.9 um) = 25.76
% Silt (3.91-31 um) = 52.98
% Coarse Silt (31 - 62.5 um) = 15.05
% Very Fine sand (62.5 - 125 um) = 3.53

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .35
% Coarse sand (500-1000 um) = 1.32
% Very Coarse sand (1000 - 2000 um) = .98



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.32	100
-0.5	(1414.21)	0.0	(1000.00)	0.66	99.68
0.0	(1000.00)	0.5	(707.10)	0.75	99.02
0.5	(707.10)	1.0	(500.00)	0.57	98.27
1.0	(500.00)	1.5	(353.55)	0.31	97.69
1.5	(353.55)	2.0	(250.00)	0.04	97.38
2.0	(250.00)	2.5	(176.78)	0	97.34
2.5	(176.78)	3.0	(125.00)	0.02	97.34
3.0	(125.00)	3.5	(88.39)	0.75	97.32
3.5	(88.39)	4.0	(62.50)	2.78	96.57
4.0	(62.50)	4.5	(44.19)	5.9	93.79
4.5	(44.19)	5.0	(31.25)	8.91	87.89
5.0	(31.25)	5.5	(22.10)	10.49	78.98
5.5	(22.10)	6.0	(15.63)	10.45	68.49
6.0	(15.63)	6.5	(11.05)	9.5	58.04
6.5	(11.05)	7.0	(7.81)	8.42	48.54
7.0	(7.81)	7.5	(5.52)	7.51	40.12
7.5	(5.52)	8.0	(3.90)	6.82	32.61

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.27	25.79
8.5	(2.76)	9.0	(1.95)	5.69	19.52
9.0	(1.95)	9.5	(1.38)	4.92	13.82
9.5	(1.38)	10.0	(0.98)	3.9	8.9
10.0	(0.98)	10.5	(0.69)	2.73	5
10.5	(0.69)	11.0	(0.49)	1.58	2.27
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 36-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Katy

Measured:
Friday, August 14, 2009 9:41:58 AM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.47

D[4,3] = 37.92um = 4.72phi
D[v,0.05] = .98um = 10phi
D[v,0.16] = 2.26um = 8.79phi

D[v,0.5] = 11.95um = 6.39phi
D[v,0.84] = 37.53um = 4.74phi
D[v,0.95] = 67.73um = 3.88phi

Kurtosis = 68.03
Skewness = 7.84
Standard Deviation = 142.41 um = 2.81phi

Inclusive SD (Sorting Coeff.) = 1.94 phi (Poorly Sorted)
Inclusive Kurtosis = .88 phi (Platykurtic)

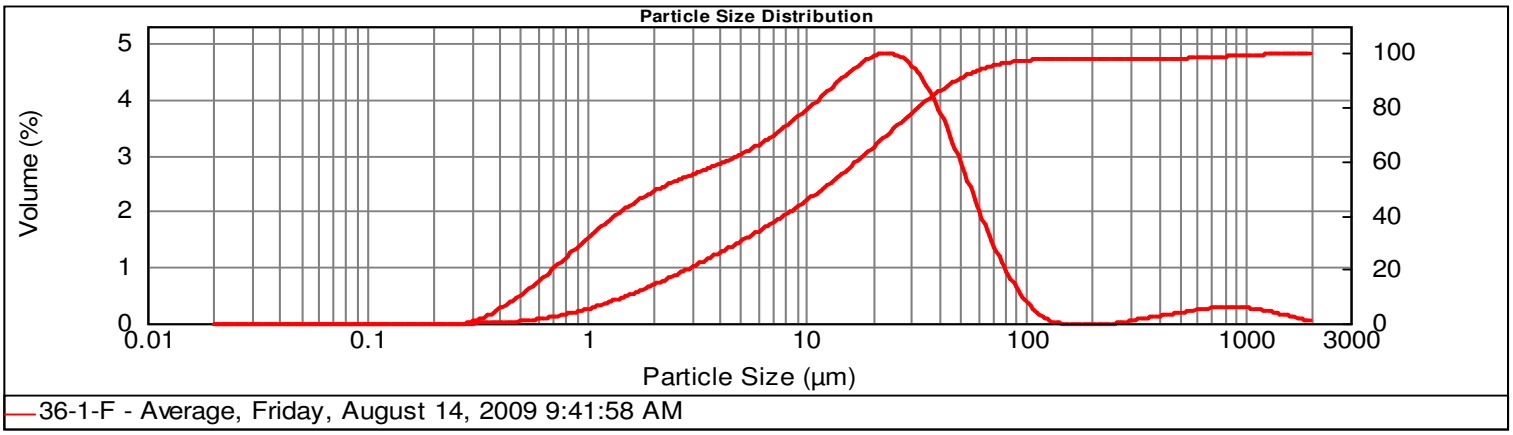
Inclusive Skewness = -0.18 (Coarse Skewed)
Inclusive Mean = 6.64 phi (Silt)

USGS
% Clay (0-2 um) = 14.09
% Fine Silt (2-3.9 um) = 11.33

d (0.1) : 1.505 **um**
d (0.5) : 11.954 **d (0.9) : 48.543**

Wentworth
% Clay (0-3.9 um) = 25.43
% Silt (3.91-31 um) = 53.17
% Coarse Silt (31 - 62.5 um) = 15.49
% Very Fine sand (62.5 - 125 um) = 3.56

% Fine sand (125-250 um) = .02
% Medium sand (250-500 um) = .41
% Coarse sand (500-1000 um) = 1.17
% Very Coarse sand (1000 - 2000 um) = .76



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.24	100
-0.5	(1414.21)	0.0	(1000.00)	0.53	99.76
0.0	(1000.00)	0.5	(707.10)	0.65	99.24
0.5	(707.10)	1.0	(500.00)	0.53	98.59
1.0	(500.00)	1.5	(353.55)	0.31	98.06
1.5	(353.55)	2.0	(250.00)	0.09	97.75
2.0	(250.00)	2.5	(176.78)	0	97.65
2.5	(176.78)	3.0	(125.00)	0.02	97.65
3.0	(125.00)	3.5	(88.39)	0.73	97.64
3.5	(88.39)	4.0	(62.50)	2.83	96.91
4.0	(62.50)	4.5	(44.19)	6.07	94.08
4.5	(44.19)	5.0	(31.25)	9.18	88.01
5.0	(31.25)	5.5	(22.10)	10.75	78.84
5.5	(22.10)	6.0	(15.63)	10.6	68.08
6.0	(15.63)	6.5	(11.05)	9.55	57.48
6.5	(11.05)	7.0	(7.81)	8.38	47.94
7.0	(7.81)	7.5	(5.52)	7.41	39.55
7.5	(5.52)	8.0	(3.90)	6.69	32.14

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	6.14	25.45
8.5	(2.76)	9.0	(1.95)	5.58	19.32
9.0	(1.95)	9.5	(1.38)	4.86	13.73
9.5	(1.38)	10.0	(0.98)	3.88	8.88
10.0	(0.98)	10.5	(0.69)	2.72	5
10.5	(0.69)	11.0	(0.49)	1.58	2.28
11.0	(0.49)	11.5	(0.35)	0.63	0.69
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 37-1-A - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:17:35 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 18.04

D[4,3] = 67.7um = 3.88phi
D[v,0.05] = 1.07um = 9.87phi
D[v,0.16] = 2.71um = 8.53phi

D[v,0.5] = 15.34um = 6.03phi
D[v,0.84] = 61.65um = 4.02phi
D[v,0.95] = 404.54um = 1.31phi

Kurtosis = 26.83
Skewness = 4.73
Standard Deviation = 176.23 um = 2.5phi

Inclusive SD (Sorting Coeff.) = 2.42 phi (Very Poorly Sorted)
Inclusive Kurtosis = 1.16 phi (Leptokurtic)

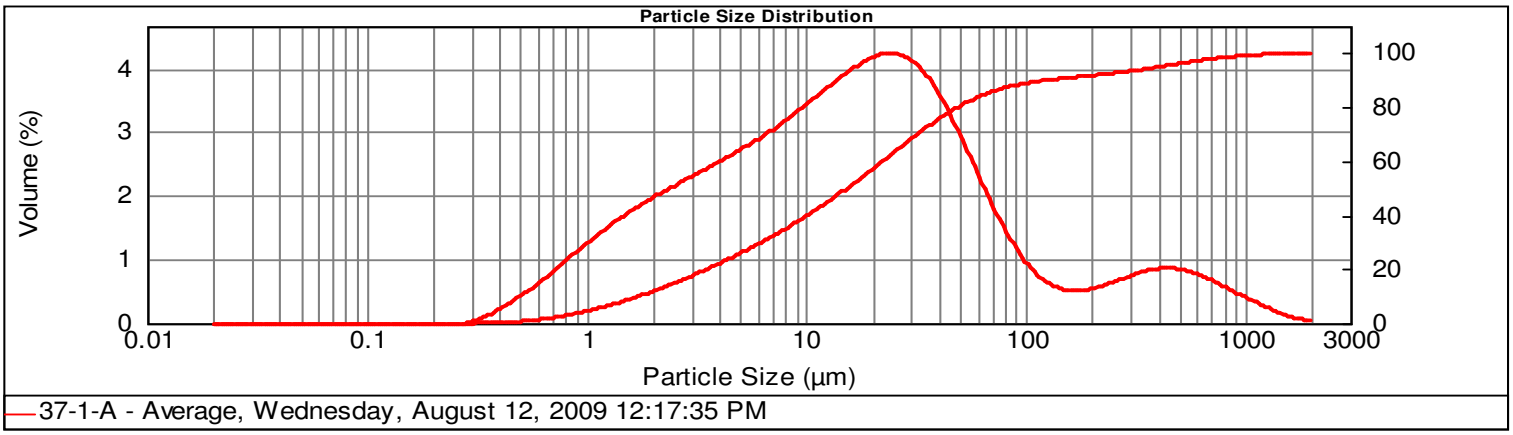
Inclusive Skewness = 0 (Near Symmetrical)
Inclusive Mean = 6.19 phi (Silt)

USGS
% Clay (0-2 um) = 11.81
% Fine Silt (2-3.9 um) = 9.79

d (0.1) : 1.729 **um**
d (0.5) : 15.341 **d (0.9) : 123.189**

Wentworth
% Clay (0-3.9 um) = 21.61
% Silt (3.91-31 um) = 47.5
% Coarse Silt (31 - 62.5 um) = 15.09
% Very Fine sand (62.5 - 125 um) = 5.86

% Fine sand (125-250 um) = 2.52
% Medium sand (250-500 um) = 3.61
% Coarse sand (500-1000 um) = 2.97
% Very Coarse sand (1000 - 2000 um) = .84



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.2	100
-0.5	(1414.21)	0.0	(1000.00)	0.64	99.8
0.0	(1000.00)	0.5	(707.10)	1.21	99.16
0.5	(707.10)	1.0	(500.00)	1.75	97.95
1.0	(500.00)	1.5	(353.55)	1.94	96.19
1.5	(353.55)	2.0	(250.00)	1.68	94.26
2.0	(250.00)	2.5	(176.78)	1.28	92.58
2.5	(176.78)	3.0	(125.00)	1.23	91.29
3.0	(125.00)	3.5	(88.39)	2.02	90.06
3.5	(88.39)	4.0	(62.50)	3.85	88.05
4.0	(62.50)	4.5	(44.19)	6.35	84.2
4.5	(44.19)	5.0	(31.25)	8.53	77.85
5.0	(31.25)	5.5	(22.10)	9.53	69.32
5.5	(22.10)	6.0	(15.63)	9.32	59.8
6.0	(15.63)	6.5	(11.05)	8.5	50.47
6.5	(11.05)	7.0	(7.81)	7.57	41.97
7.0	(7.81)	7.5	(5.52)	6.74	34.4
7.5	(5.52)	8.0	(3.90)	6.02	27.66
8.0	(3.90)	8.5	(2.76)	5.38	21.63
8.5	(2.76)	9.0	(1.95)	4.74	16.25
9.0	(1.95)	9.5	(1.38)	4.05	11.51
9.5	(1.38)	10.0	(0.98)	3.23	7.45
10.0	(0.98)	10.5	(0.69)	2.28	4.22
10.5	(0.69)	11.0	(0.49)	1.34	1.94
11.0	(0.49)	11.5	(0.35)	0.55	0.6
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 37-1-B - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:22:02 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 12.80

D[4,3] = 43.47um = 4.52phi
D[v,0.05] = 1.09um = 9.84phi
D[v,0.16] = 2.78um = 8.49phi

D[v,0.5] = 15.79um = 5.98phi
D[v,0.84] = 48.91um = 4.35phi
D[v,0.95] = 92.76um = 3.43phi

Kurtosis = 64.05
Skewness = 7.44
Standard Deviation = 135.86 um = 2.88phi

Inclusive SD (Sorting Coeff.) = 2.01 phi (Very Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

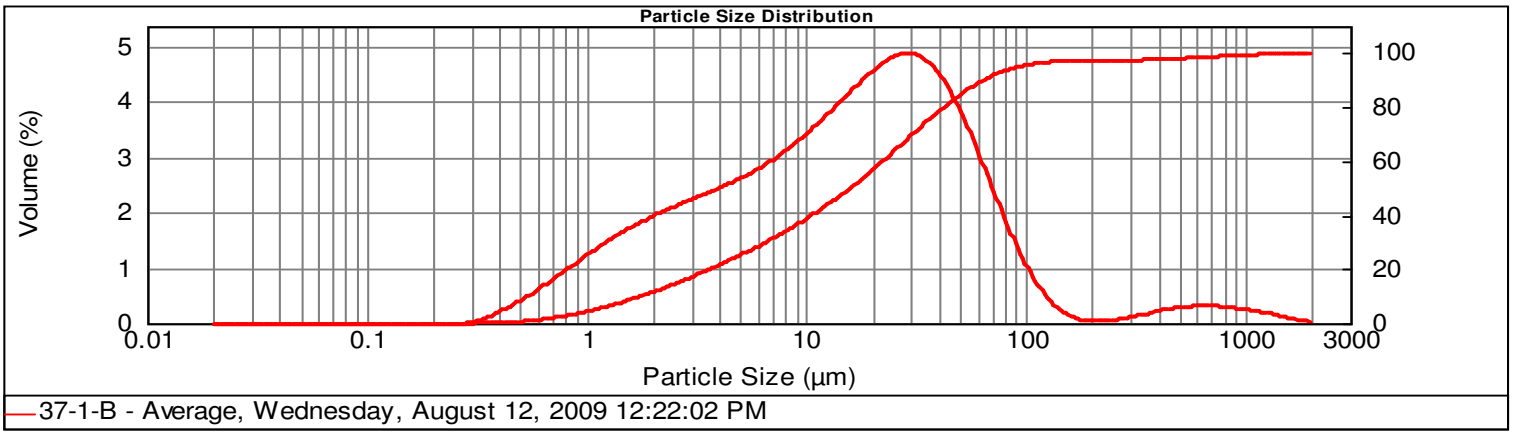
Inclusive Skewness = -0.21 (Coarse Skewed)
Inclusive Mean = 6.28 phi (Silt)

USGS
% Clay (0-2 um) = 11.56
% Fine Silt (2-3.9 um) = 9.54

d (0.1) : 1.762 **um**
d (0.5) : 15.791 **d (0.9) : 63.982**

Wentworth
% Clay (0-3.9 um) = 21.1
% Silt (3.91-31 um) = 49.4
% Coarse Silt (31 - 62.5 um) = 19.06
% Very Fine sand (62.5 - 125 um) = 7.1

% Fine sand (125-250 um) = .6
% Medium sand (250-500 um) = .78
% Coarse sand (500-1000 um) = 1.34
% Very Coarse sand (1000 - 2000 um) = .62



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.45	99.83
0.0	(1000.00)	0.5	(707.10)	0.65	99.38
0.5	(707.10)	1.0	(500.00)	0.69	98.73
1.0	(500.00)	1.5	(353.55)	0.53	98.04
1.5	(353.55)	2.0	(250.00)	0.25	97.51
2.0	(250.00)	2.5	(176.78)	0.1	97.26
2.5	(176.78)	3.0	(125.00)	0.5	97.16
3.0	(125.00)	3.5	(88.39)	2.1	96.66
3.5	(88.39)	4.0	(62.50)	5	94.56
4.0	(62.50)	4.5	(44.19)	8.28	89.56
4.5	(44.19)	5.0	(31.25)	10.52	81.27
5.0	(31.25)	5.5	(22.10)	10.96	70.75
5.5	(22.10)	6.0	(15.63)	10.08	59.79
6.0	(15.63)	6.5	(11.05)	8.75	49.71
6.5	(11.05)	7.0	(7.81)	7.51	40.96
7.0	(7.81)	7.5	(5.52)	6.53	33.45
7.5	(5.52)	8.0	(3.90)	5.8	26.92
8.0	(3.90)	8.5	(2.76)	5.22	21.12
8.5	(2.76)	9.0	(1.95)	4.65	15.91
9.0	(1.95)	9.5	(1.38)	3.99	11.26
9.5	(1.38)	10.0	(0.98)	3.18	7.27
10.0	(0.98)	10.5	(0.69)	2.23	4.09
10.5	(0.69)	11.0	(0.49)	1.3	1.86
11.0	(0.49)	11.5	(0.35)	0.52	0.56
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 37-1-C - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:27:06 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.88

D[4,3] = 42.75um = 4.55phi
D[v,0.05] = 1.08um = 9.86phi
D[v,0.16] = 2.75um = 8.51phi

D[v,0.5] = 15.6um = 6phi
D[v,0.84] = 46.72um = 4.42phi
D[v,0.95] = 83.91um = 3.57phi

Kurtosis = 68.38
Skewness = 7.81
Standard Deviation = 144.24 um = 2.79phi

Inclusive SD (Sorting Coeff.) = 1.97 phi (Poorly Sorted)
Inclusive Kurtosis = .92 phi (Mesokurtic)

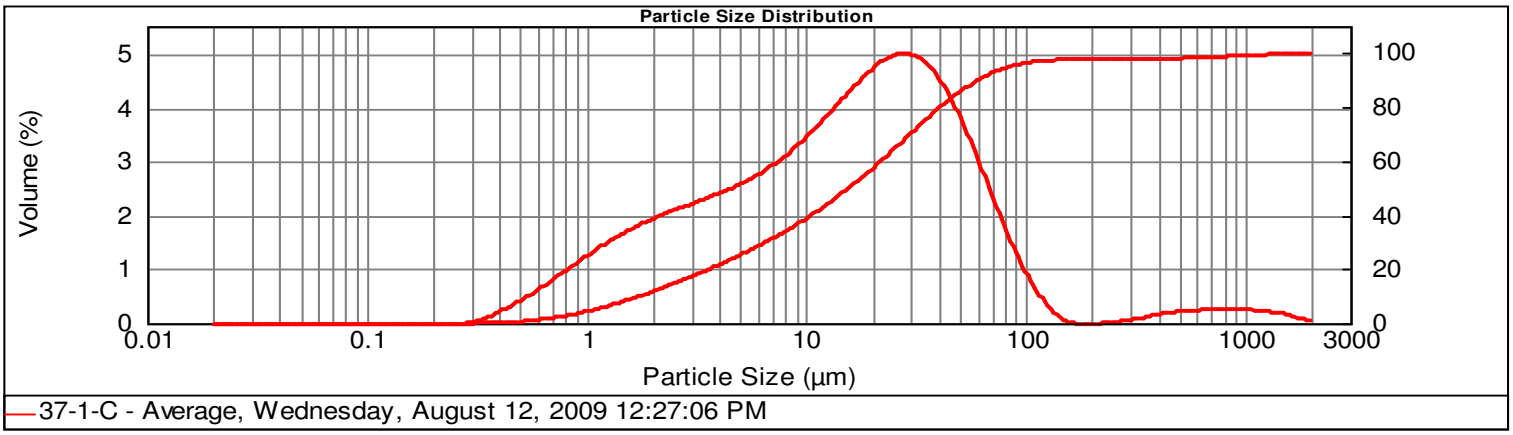
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.31 phi (Silt)

USGS
% Clay (0-2 um) = 11.73
% Fine Silt (2-3.9 um) = 9.49

d (0.1) : 1.738 **um**
d (0.5) : 15.602 **d (0.9) : 60.288**

Wentworth
% Clay (0-3.9 um) = 21.22
% Silt (3.91-31 um) = 50.31
% Coarse Silt (31 - 62.5 um) = 19.17
% Very Fine sand (62.5 - 125 um) = 6.63

% Fine sand (125-250 um) = .23
% Medium sand (250-500 um) = .54
% Coarse sand (500-1000 um) = 1.12
% Very Coarse sand (1000 - 2000 um) = .78



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.27	100
-0.5	(1414.21)	0.0	(1000.00)	0.51	99.73
0.0	(1000.00)	0.5	(707.10)	0.58	99.22
0.5	(707.10)	1.0	(500.00)	0.54	98.64
1.0	(500.00)	1.5	(353.55)	0.4	98.09
1.5	(353.55)	2.0	(250.00)	0.14	97.69
2.0	(250.00)	2.5	(176.78)	0	97.55
2.5	(176.78)	3.0	(125.00)	0.22	97.55
3.0	(125.00)	3.5	(88.39)	1.82	97.33
3.5	(88.39)	4.0	(62.50)	4.8	95.5
4.0	(62.50)	4.5	(44.19)	8.23	90.7
4.5	(44.19)	5.0	(31.25)	10.68	82.47
5.0	(31.25)	5.5	(22.10)	11.31	71.8
5.5	(22.10)	6.0	(15.63)	10.45	60.49
6.0	(15.63)	6.5	(11.05)	8.99	50.04
6.5	(11.05)	7.0	(7.81)	7.58	41.05
7.0	(7.81)	7.5	(5.52)	6.49	33.47
7.5	(5.52)	8.0	(3.90)	5.73	26.98

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	5.17	21.25
8.5	(2.76)	9.0	(1.95)	4.64	16.08
9.0	(1.95)	9.5	(1.38)	4.02	11.43
9.5	(1.38)	10.0	(0.98)	3.22	7.41
10.0	(0.98)	10.5	(0.69)	2.28	4.19
10.5	(0.69)	11.0	(0.49)	1.33	1.91
11.0	(0.49)	11.5	(0.35)	0.53	0.58
11.5	(0.35)	12.0	(0.24)	0.05	0.05
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 37-1-D - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:31:48 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 8.76

D[4,3] = 24.23um = 5.37phi
D[v,0.05] = 1.07um = 9.86phi
D[v,0.16] = 2.7um = 8.53phi

D[v,0.5] = 14.81um = 6.08phi
D[v,0.84] = 41.52um = 4.59phi
D[v,0.95] = 67.01um = 3.9phi

Kurtosis = 198.83
Skewness = 12.53
Standard Deviation = 49.35 um = 4.34phi

Inclusive SD (Sorting Coeff.) = 1.89 phi (Poorly Sorted)
Inclusive Kurtosis = .9 phi (Platykurtic)

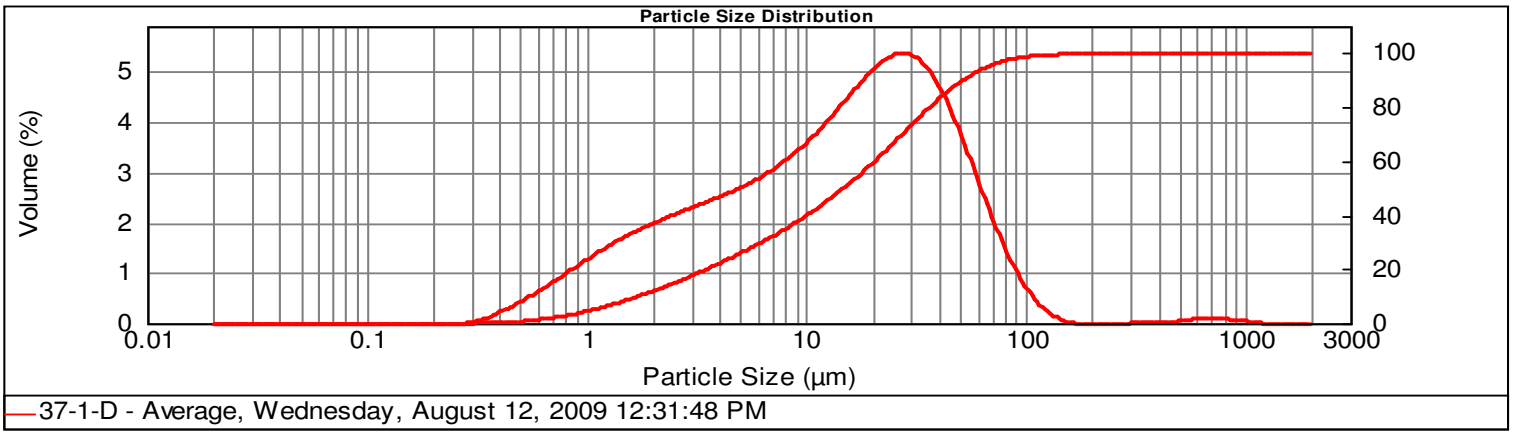
Inclusive Skewness = -0.26 (Coarse Skewed)
Inclusive Mean = 6.4 phi (Silt)

USGS
% Clay (0-2 um) = 11.86
% Fine Silt (2-3.9 um) = 9.77

d (0.1) : 1.724 **um**
d (0.5) : 14.815 **d (0.9) : 51.810**

Wentworth
% Clay (0-3.9 um) = 21.63
% Silt (3.91-31 um) = 52.77
% Coarse Silt (31 - 62.5 um) = 19.47
% Very Fine sand (62.5 - 125 um) = 5.56

% Fine sand (125-250 um) = .16
% Medium sand (250-500 um) = .06
% Coarse sand (500-1000 um) = .33
% Very Coarse sand (1000 - 2000 um) = .02



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0.02	100
0.0	(1000.00)	0.5	(707.10)	0.16	99.98
0.5	(707.10)	1.0	(500.00)	0.16	99.82
1.0	(500.00)	1.5	(353.55)	0.05	99.65
1.5	(353.55)	2.0	(250.00)	0.01	99.6
2.0	(250.00)	2.5	(176.78)	0	99.59
2.5	(176.78)	3.0	(125.00)	0.16	99.59
3.0	(125.00)	3.5	(88.39)	1.38	99.43
3.5	(88.39)	4.0	(62.50)	4.18	98.05
4.0	(62.50)	4.5	(44.19)	8.03	93.87
4.5	(44.19)	5.0	(31.25)	11.16	85.84
5.0	(31.25)	5.5	(22.10)	12.08	74.68
5.5	(22.10)	6.0	(15.63)	11.05	62.6
6.0	(15.63)	6.5	(11.05)	9.35	51.55
6.5	(11.05)	7.0	(7.81)	7.84	42.2
7.0	(7.81)	7.5	(5.52)	6.74	34.36
7.5	(5.52)	8.0	(3.90)	5.96	27.61
8.0	(3.90)	8.5	(2.76)	5.34	21.65
8.5	(2.76)	9.0	(1.95)	4.75	16.31
9.0	(1.95)	9.5	(1.38)	4.09	11.56
9.5	(1.38)	10.0	(0.98)	3.26	7.47
10.0	(0.98)	10.5	(0.69)	2.3	4.2
10.5	(0.69)	11.0	(0.49)	1.34	1.91
11.0	(0.49)	11.5	(0.35)	0.52	0.57
11.5	(0.35)	12.0	(0.24)	0.04	0.04
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 37-1-E - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:36:17 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 16.25

D[4,3] = 37.79um = 4.73phi
D[v,0.05] = 1.04um = 9.91phi
D[v,0.16] = 2.64um = 8.56phi

D[v,0.5] = 16.36um = 5.93phi
D[v,0.84] = 51.54um = 4.28phi
D[v,0.95] = 88.07um = 3.51phi

Kurtosis = 102.7
Skewness = 9.44
Standard Deviation = 116.95 um = 3.1phi

Inclusive SD (Sorting Coeff.) = 2.04 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

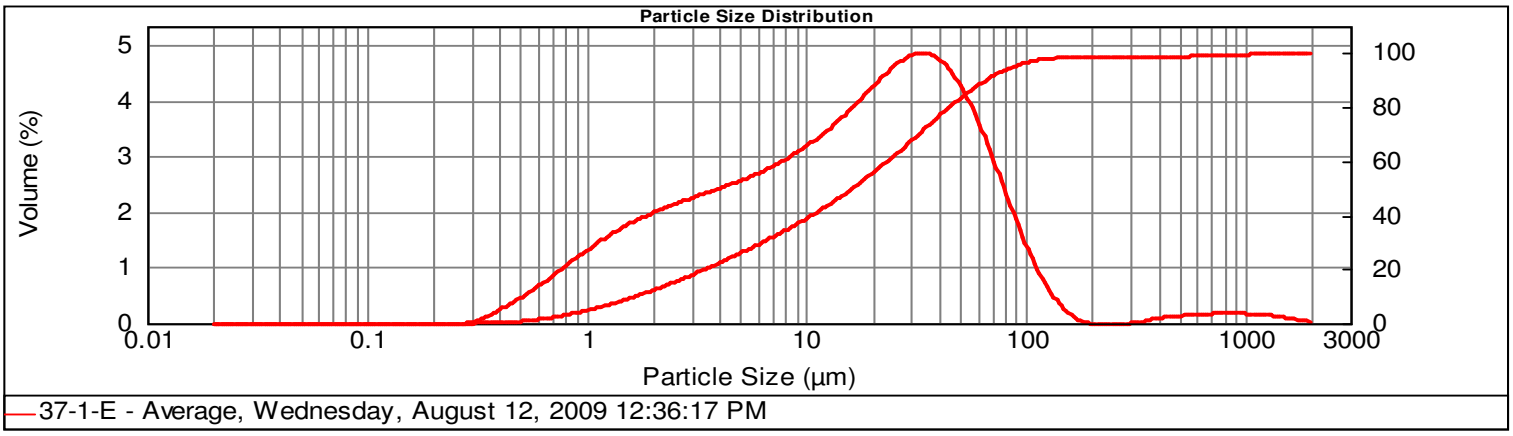
Inclusive Skewness = -0.23 (Coarse Skewed)
Inclusive Mean = 6.26 phi (Silt)

USGS
% Clay (0-2 um) = 12.22
% Fine Silt (2-3.9 um) = 9.6

d (0.1) : 1.675 um
d (0.5) : 16.362
d (0.9) : 65.771

Wentworth
% Clay (0-3.9 um) = 21.81
% Silt (3.91-31 um) = 46.64
% Coarse Silt (31 - 62.5 um) = 20.41
% Very Fine sand (62.5 - 125 um) = 8.99

% Fine sand (125-250 um) = .66
% Medium sand (250-500 um) = .24
% Coarse sand (500-1000 um) = .74
% Very Coarse sand (1000 - 2000 um) = .5



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.17	100
-0.5	(1414.21)	0.0	(1000.00)	0.34	99.83
0.0	(1000.00)	0.5	(707.10)	0.39	99.5
0.5	(707.10)	1.0	(500.00)	0.35	99.1
1.0	(500.00)	1.5	(353.55)	0.22	98.76
1.5	(353.55)	2.0	(250.00)	0.02	98.54
2.0	(250.00)	2.5	(176.78)	0	98.52
2.5	(176.78)	3.0	(125.00)	0.65	98.52
3.0	(125.00)	3.5	(88.39)	2.82	97.86
3.5	(88.39)	4.0	(62.50)	6.17	95.05
4.0	(62.50)	4.5	(44.19)	9.31	88.87
4.5	(44.19)	5.0	(31.25)	10.85	79.56
5.0	(31.25)	5.5	(22.10)	10.56	68.71
5.5	(22.10)	6.0	(15.63)	9.32	58.16
6.0	(15.63)	6.5	(11.05)	8.03	48.84
6.5	(11.05)	7.0	(7.81)	7.02	40.81
7.0	(7.81)	7.5	(5.52)	6.26	33.79
7.5	(5.52)	8.0	(3.90)	5.69	27.53
8.0	(3.90)	8.5	(2.76)	5.21	21.84
8.5	(2.76)	9.0	(1.95)	4.72	16.63
9.0	(1.95)	9.5	(1.38)	4.12	11.91
9.5	(1.38)	10.0	(0.98)	3.34	7.79
10.0	(0.98)	10.5	(0.69)	2.39	4.44
10.5	(0.69)	11.0	(0.49)	1.42	2.05
11.0	(0.49)	11.5	(0.35)	0.58	0.64
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: 37-1-F - Average
Source:
Cruise: DAMOS

SOP Name: DAMOS
Measured by: Administrator

Measured: Wednesday, August 12, 2009 12:41:11 PM

Particle Name: Fraunhofer
Dispersant Name: Water

Particle RI: 0.000
Dispersant RI: 1.330

Absorption: 0

Obscuration : 15.58

D[4,3] = 35.29um = 4.82phi
D[v,0.05] = 1.04um = 9.9phi
D[v,0.16] = 2.65um = 8.56phi

D[v,0.5] = 16.58um = 5.91phi
D[v,0.84] = 52.16um = 4.26phi
D[v,0.95] = 88.67um = 3.5phi

Kurtosis = 92.75
Skewness = 8.92
Standard Deviation = 93.78 um = 3.41phi

Inclusive SD (Sorting Coeff.) = 2.05 phi (Very Poorly Sorted)
Inclusive Kurtosis = .87 phi (Platykurtic)

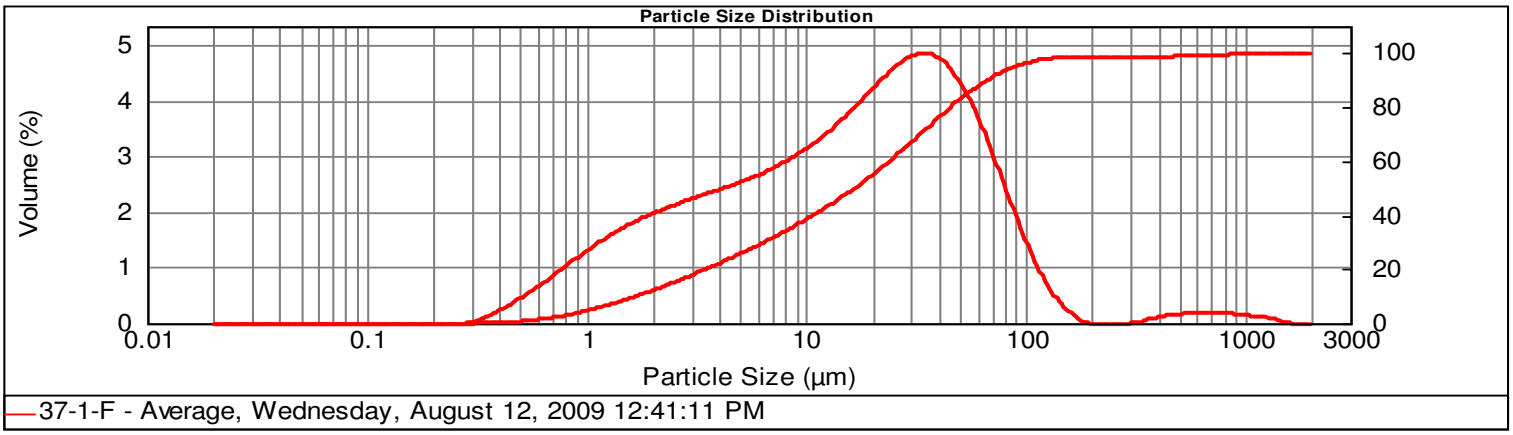
Inclusive Skewness = -0.24 (Coarse Skewed)
Inclusive Mean = 6.24 phi (Silt)

USGS
% Clay (0-2 um) = 12.18
% Fine Silt (2-3.9 um) = 9.57

d (0.1) : 1.679 **um**
d (0.5) : 16.582 **d (0.9) : 66.456**

Wentworth
% Clay (0-3.9 um) = 21.75
% Silt (3.91-31 um) = 46.29
% Coarse Silt (31 - 62.5 um) = 20.58
% Very Fine sand (62.5 - 125 um) = 9.29

% Fine sand (125-250 um) = .72
% Medium sand (250-500 um) = .3
% Coarse sand (500-1000 um) = .81
% Very Coarse sand (1000 - 2000 um) = .27



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0.02	100
-0.5	(1414.21)	0.0	(1000.00)	0.25	99.98
0.0	(1000.00)	0.5	(707.10)	0.39	99.73
0.5	(707.10)	1.0	(500.00)	0.41	99.34
1.0	(500.00)	1.5	(353.55)	0.28	98.93
1.5	(353.55)	2.0	(250.00)	0.02	98.65
2.0	(250.00)	2.5	(176.78)	0	98.63
2.5	(176.78)	3.0	(125.00)	0.72	98.63
3.0	(125.00)	3.5	(88.39)	2.95	97.91
3.5	(88.39)	4.0	(62.50)	6.34	94.96
4.0	(62.50)	4.5	(44.19)	9.44	88.62
4.5	(44.19)	5.0	(31.25)	10.89	79.18
5.0	(31.25)	5.5	(22.10)	10.53	68.29
5.5	(22.10)	6.0	(15.63)	9.26	57.77
6.0	(15.63)	6.5	(11.05)	7.96	48.51
6.5	(11.05)	7.0	(7.81)	6.94	40.56
7.0	(7.81)	7.5	(5.52)	6.19	33.62
7.5	(5.52)	8.0	(3.90)	5.64	27.42
8.0	(3.90)	8.5	(2.76)	5.19	21.78
8.5	(2.76)	9.0	(1.95)	4.71	16.59
9.0	(1.95)	9.5	(1.38)	4.12	11.88
9.5	(1.38)	10.0	(0.98)	3.34	7.76
10.0	(0.98)	10.5	(0.69)	2.38	4.42
10.5	(0.69)	11.0	(0.49)	1.41	2.04
11.0	(0.49)	11.5	(0.35)	0.57	0.63
11.5	(0.35)	12.0	(0.24)	0.06	0.06
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: QAS30223
Source: Factory = Paris
Cruise:

SOP Name: QAS2002
Measured by: Katy

Measured: Monday, August 17, 2009 3:07:51 PM

Particle Name: Glass beads (typical)
Dispersant Name: Water

Particle RI: 1.520
Dispersant RI: 1.330

Absorption: 0

Obscuration : 26.30

D[4,3] = 52.27um = 4.26phi
D[v,0.05] = 25.54um = 5.29phi
D[v,0.16] = 32.45um = 4.95phi

D[v,0.5] = 48.55um = 4.36phi
D[v,0.84] = 72.48um = 3.79phi
D[v,0.95] = 91.7um = 3.45phi

Kurtosis = .71
Skewness = .9
Standard Deviation = 20.6 um = 5.6phi

Inclusive SD (Sorting Coeff.) = .57 phi (Moderately Well
Inclusive Kurtosis = .95 phi (Mesokurtic)

Inclusive Skewness = 0 (Near Symmetrical)
Inclusive Mean = 4.37 phi (Silt)

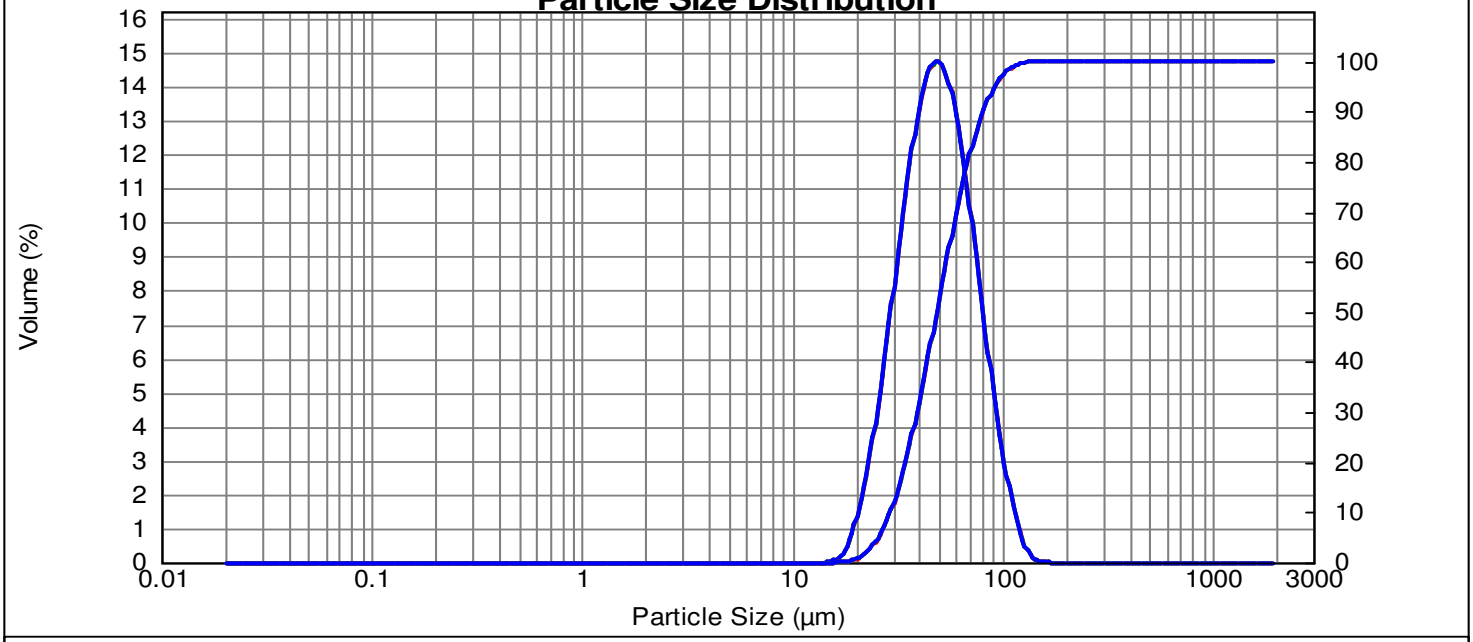
USGS
% Clay (0-2 um) = 0
% Fine Silt (2-3.9 um) = 0

d (0.1) : 29.083 um
d (0.5) : 48.553
d (0.9) : 80.724

Wentworth
% Clay (0-3.9 um) = 0
% Silt (3.91-31 um) = 13.29
% Coarse Silt (31 - 62.5 um) = 59.88
% Very Fine sand (62.5 - 125 um) = 26.6

% Fine sand (125-250 um) = .22
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0

Particle Size Distribution



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.22	100
3.0	(125.00)	3.5	(88.39)	6	99.78
3.5	(88.39)	4.0	(62.50)	20.6	93.78
4.0	(62.50)	4.5	(44.19)	32.2	73.18
4.5	(44.19)	5.0	(31.25)	27.23	40.98
5.0	(31.25)	5.5	(22.10)	11.95	13.75
5.5	(22.10)	6.0	(15.63)	1.8	1.8
6.0	(15.63)	6.5	(11.05)	0	0
6.5	(11.05)	7.0	(7.81)	0	0
7.0	(7.81)	7.5	(5.52)	0	0
7.5	(5.52)	8.0	(3.90)	0	0

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	0	0
8.5	(2.76)	9.0	(1.95)	0	0
9.0	(1.95)	9.5	(1.38)	0	0
9.5	(1.38)	10.0	(0.98)	0	0
10.0	(0.98)	10.5	(0.69)	0	0
10.5	(0.69)	11.0	(0.49)	0	0
11.0	(0.49)	11.5	(0.35)	0	0
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: QAS30247
Source: Factory = Paris
Cruise:

SOP Name: QAS2002
Measured by: Katy

Measured: Monday, August 17, 2009 2:42:47 PM

Particle Name: Glass beads (typical)
Dispersant Name: Water

Particle RI: 1.520
Dispersant RI: 1.330

Absorption: 0

Obscuration : 27.90

D[4,3] = 52.14um = 4.26phi
D[v,0.05] = 25.48um = 5.29phi
D[v,0.16] = 32.38um = 4.95phi

D[v,0.5] = 48.44um = 4.37phi
D[v,0.84] = 72.29um = 3.79phi
D[v,0.95] = 91.45um = 3.45phi

Kurtosis = .71
Skewness = .9
Standard Deviation = 20.54 um = 5.61phi

Inclusive SD (Sorting Coeff.) = .57 phi (Moderately Well
Inclusive Kurtosis = .95 phi (Mesokurtic)

Inclusive Skewness = 0 (Near Symmetrical)
Inclusive Mean = 4.37 phi (Silt)

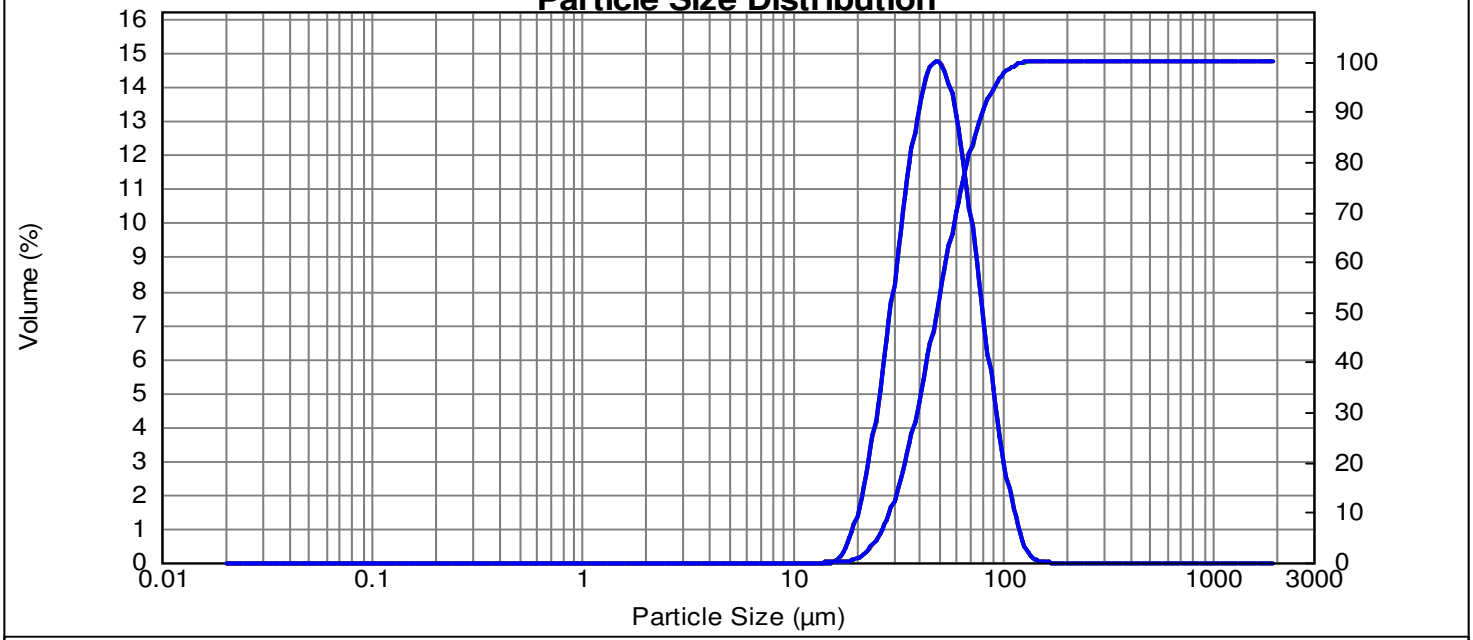
USGS
% Clay (0-2 um) = 0
% Fine Silt (2-3.9 um) = 0

d (0.1) : 29.022 **um**
d (0.5) : 48.441 **d (0.9) : 80.511**

Wentworth
% Clay (0-3.9 um) = 0
% Silt (3.91-31 um) = 13.41
% Coarse Silt (31 - 62.5 um) = 59.97
% Very Fine sand (62.5 - 125 um) = 26.41

% Fine sand (125-250 um) = .21
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0

Particle Size Distribution



Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.21	100
3.0	(125.00)	3.5	(88.39)	5.91	99.79
3.5	(88.39)	4.0	(62.50)	20.49	93.88
4.0	(62.50)	4.5	(44.19)	32.19	73.38
4.5	(44.19)	5.0	(31.25)	27.32	41.19
5.0	(31.25)	5.5	(22.10)	12.04	13.87
5.5	(22.10)	6.0	(15.63)	1.83	1.83
6.0	(15.63)	6.5	(11.05)	0	0
6.5	(11.05)	7.0	(7.81)	0	0
7.0	(7.81)	7.5	(5.52)	0	0
7.5	(5.52)	8.0	(3.90)	0	0

Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	0	0
8.5	(2.76)	9.0	(1.95)	0	0
9.0	(1.95)	9.5	(1.38)	0	0
9.5	(1.38)	10.0	(0.98)	0	0
10.0	(0.98)	10.5	(0.69)	0	0
10.5	(0.69)	11.0	(0.49)	0	0
11.0	(0.49)	11.5	(0.35)	0	0
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

Grain-Size Analysis Report

Sample: QAS30271
Source: Factory = Paris
Cruise:

SOP Name: QAS2002
Measured by: Katy

Measured: Monday, August 17, 2009 2:55:38 PM

Particle Name: Glass beads (typical)
Dispersant Name: Water

Particle RI: 1.520
Dispersant RI: 1.330

Absorption: 0

Obscuration : 21.41

D[4,3] = 51.93um = 4.27phi
D[v,0.05] = 25.42um = 5.3phi
D[v,0.16] = 32.28um = 4.95phi

D[v,0.5] = 48.26um = 4.37phi
D[v,0.84] = 71.98um = 3.8phi
D[v,0.95] = 91.03um = 3.46phi

Kurtosis = .69
Skewness = .9
Standard Deviation = 20.42 um = 5.61phi

Inclusive SD (Sorting Coeff.) = .57 phi (Moderately Well
Inclusive Kurtosis = .95 phi (Mesokurtic)

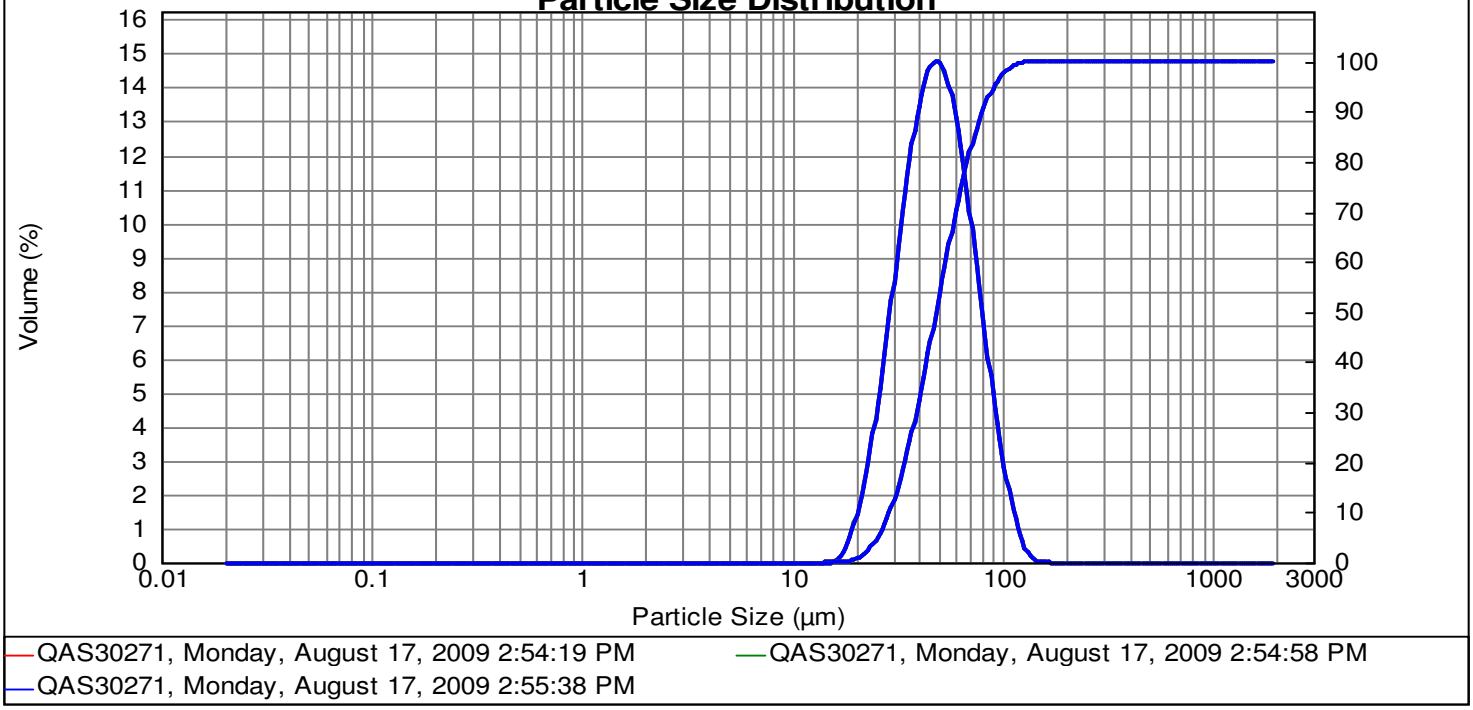
Inclusive Skewness = 0 (Near Symmetrical)
Inclusive Mean = 4.37 phi (Silt)

USGS
% Clay (0-2 um) = 0
% Fine Silt (2-3.9 um) = 0

d (0.1) : 28.941 um
d (0.5) : 48.263
d (0.9) : 80.158

Wentworth
% Clay (0-3.9 um) = 0
% Silt (3.91-31 um) = 13.58
% Coarse Silt (31 - 62.5 um) = 60.13
% Very Fine sand (62.5 - 125 um) = 26.1
% Fine sand (125-250 um) = .19
% Medium sand (250-500 um) = 0
% Coarse sand (500-1000 um) = 0
% Very Coarse sand (1000 - 2000 um) = 0

Particle Size Distribution

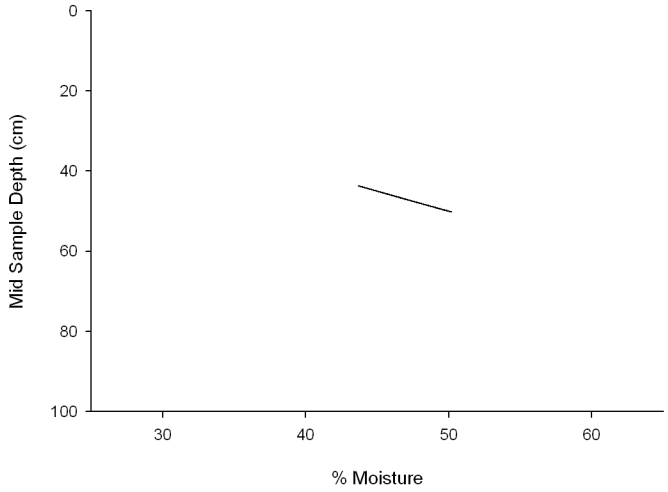


Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
-1	(2000.00)	-0.5	(1414.21)	0	100
-0.5	(1414.21)	0.0	(1000.00)	0	100
0.0	(1000.00)	0.5	(707.10)	0	100
0.5	(707.10)	1.0	(500.00)	0	100
1.0	(500.00)	1.5	(353.55)	0	100
1.5	(353.55)	2.0	(250.00)	0	100
2.0	(250.00)	2.5	(176.78)	0	100
2.5	(176.78)	3.0	(125.00)	0.19	100
3.0	(125.00)	3.5	(88.39)	5.78	99.81
3.5	(88.39)	4.0	(62.50)	20.33	94.04
4.0	(62.50)	4.5	(44.19)	32.18	73.71
4.5	(44.19)	5.0	(31.25)	27.48	41.53
5.0	(31.25)	5.5	(22.10)	12.18	14.04
5.5	(22.10)	6.0	(15.63)	1.86	1.86
6.0	(15.63)	6.5	(11.05)	0	0
6.5	(11.05)	7.0	(7.81)	0	0
7.0	(7.81)	7.5	(5.52)	0	0
7.5	(5.52)	8.0	(3.90)	0	0

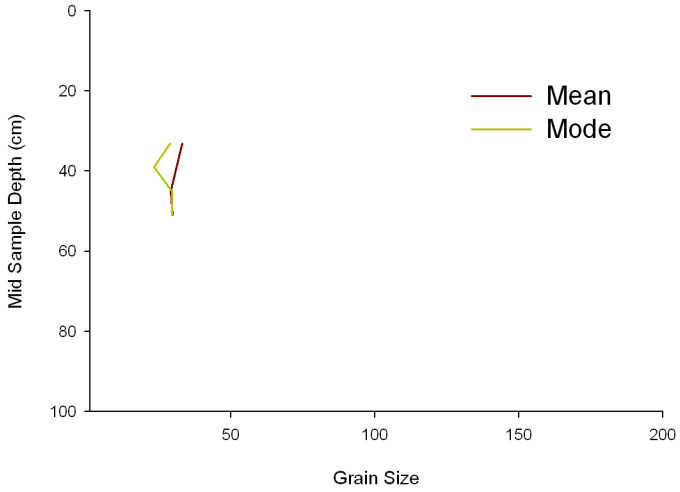
Size Hi phi	Size Hi um	Size Lo phi	Size Lo um	% In	% Below
8.0	(3.90)	8.5	(2.76)	0	0
8.5	(2.76)	9.0	(1.95)	0	0
9.0	(1.95)	9.5	(1.38)	0	0
9.5	(1.38)	10.0	(0.98)	0	0
10.0	(0.98)	10.5	(0.69)	0	0
10.5	(0.69)	11.0	(0.49)	0	0
11.0	(0.49)	11.5	(0.35)	0	0
11.5	(0.35)	12.0	(0.24)	0	0
12.0	(0.24)	12.5	(0.17)	0	0
12.5	(0.17)	13.0	(0.12)	0	0
13.0	(0.12)	13.5	(0.086)	0	0
13.5	(0.086)	14.0	(0.061)	0	0
14.0	(0.061)	14.5	(0.043)	0	0
14.5	(0.043)	15.0	(0.030)	0	0
15.0	(0.030)	15.5	(0.020)	0	0

Notes:

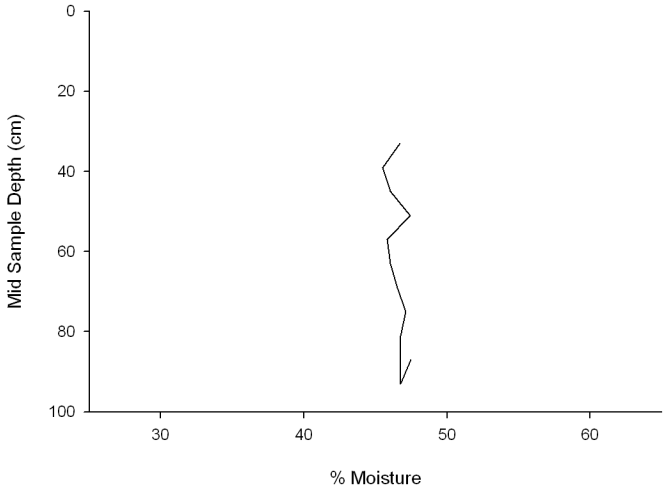
Core 1-4



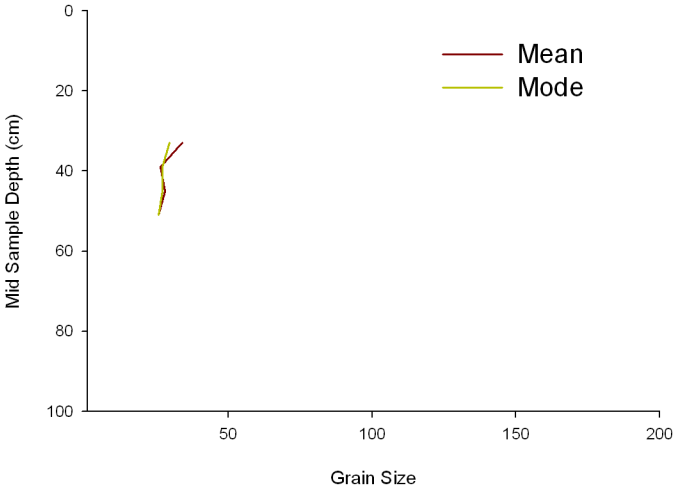
Core 1-4



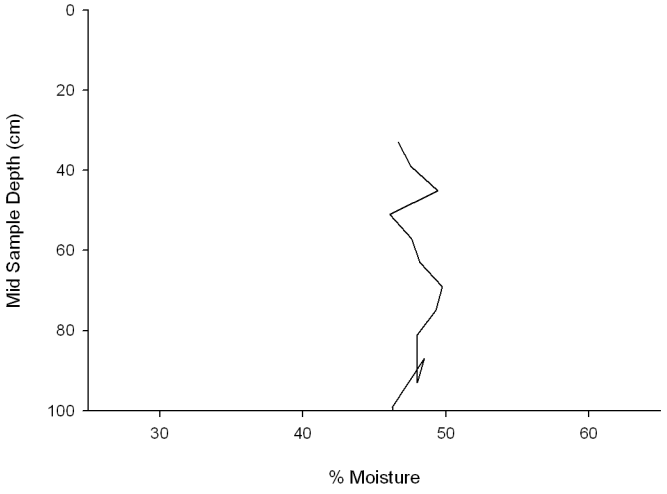
Core 3-1



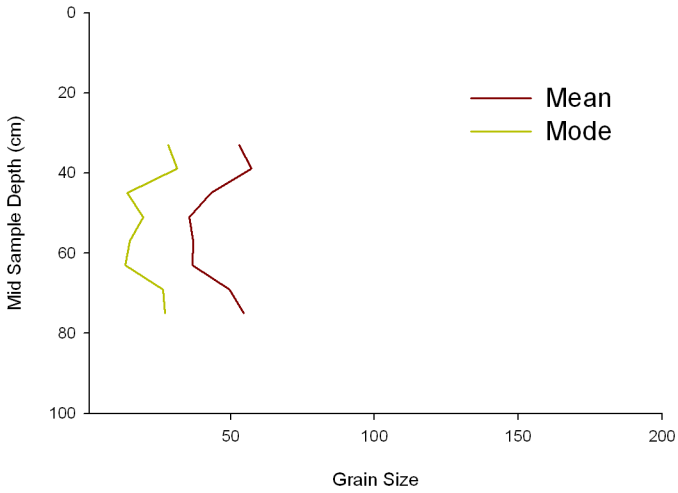
Core 3-1



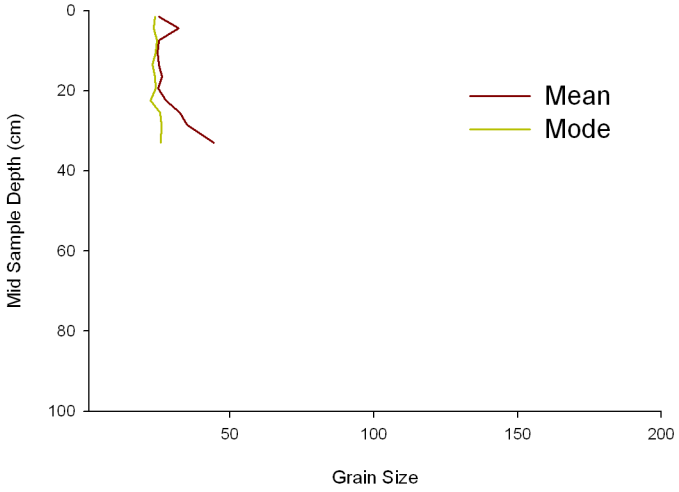
Core 5-1



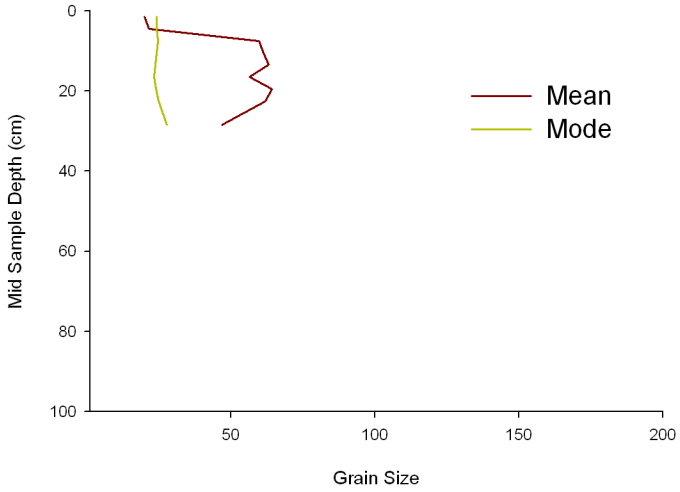
Core 5-1



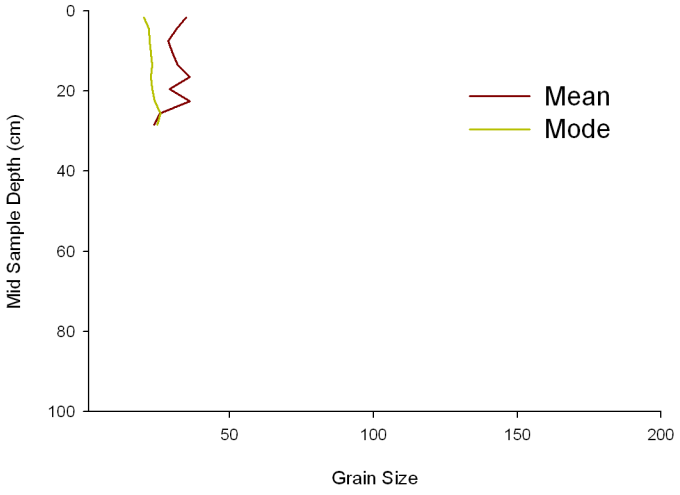
Core 1-5



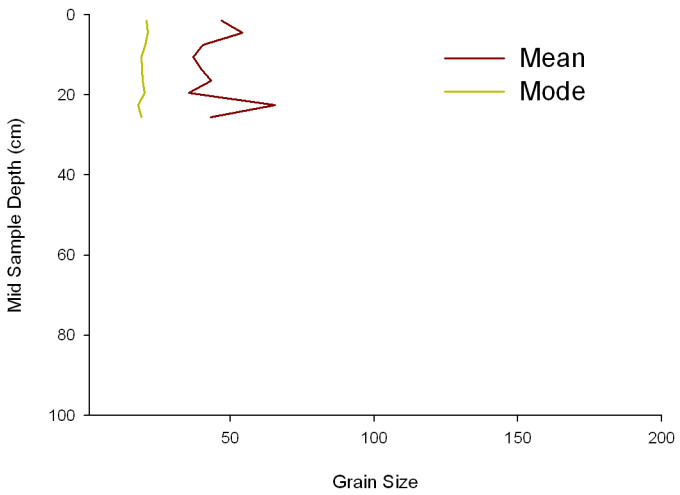
Core 2-5



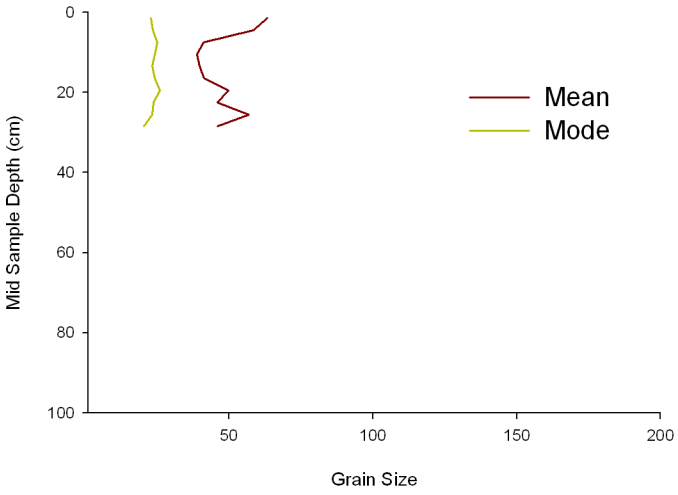
Core 3-2



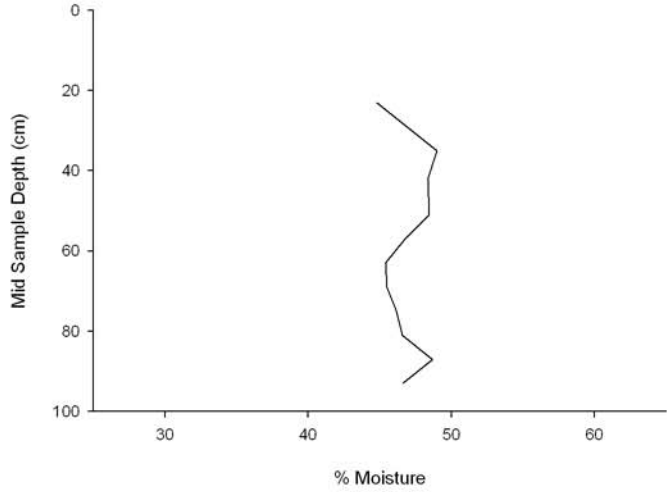
Core 4-1



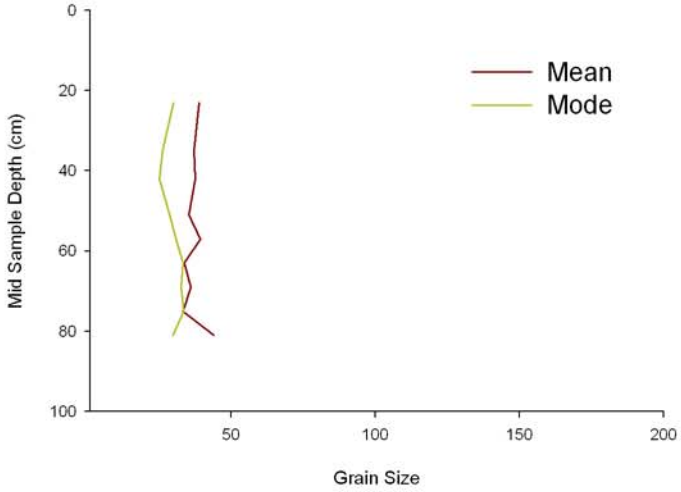
Core 5-2



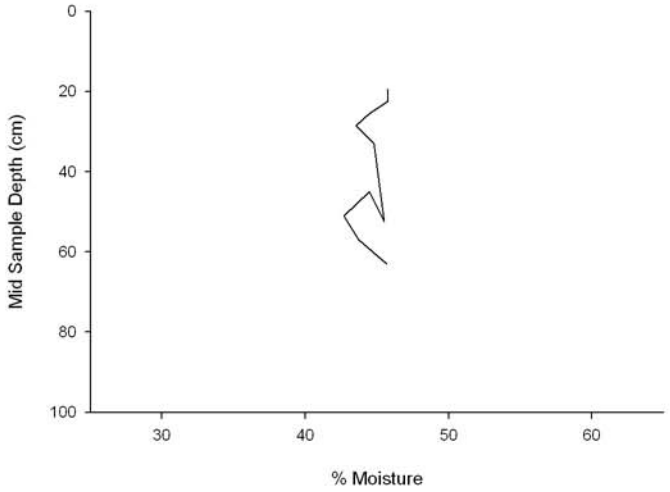
Core 6-1



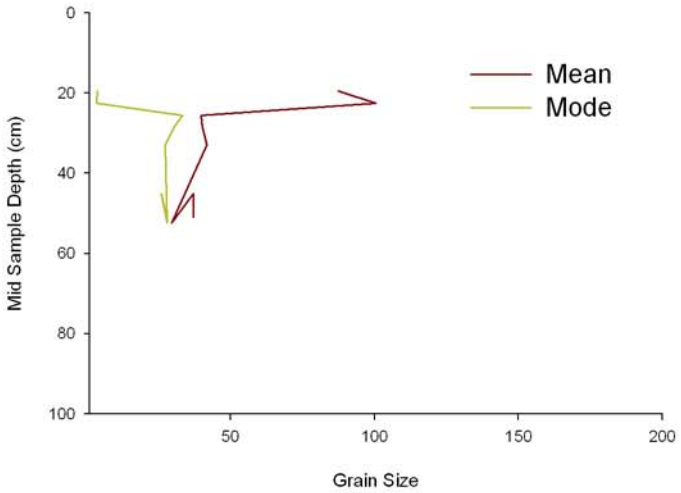
Core 6-1



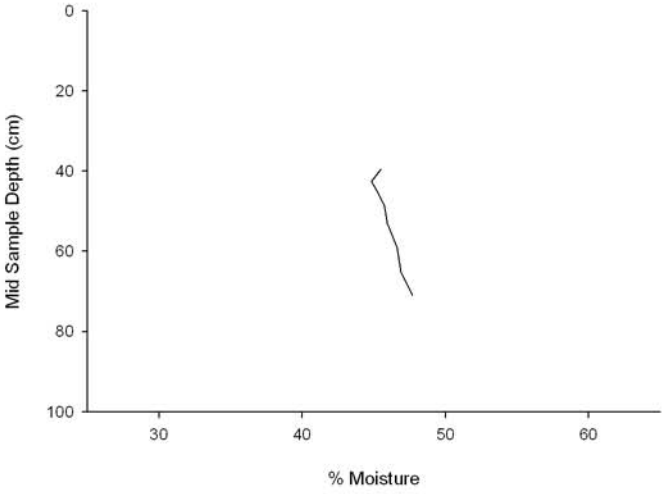
Core 7-1



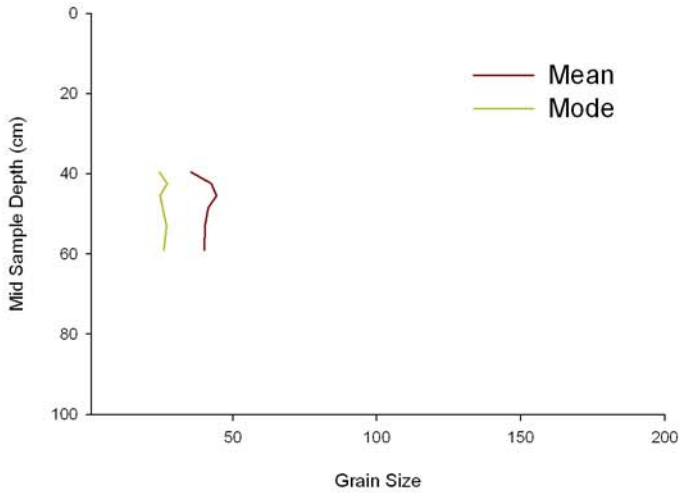
Core 7-1



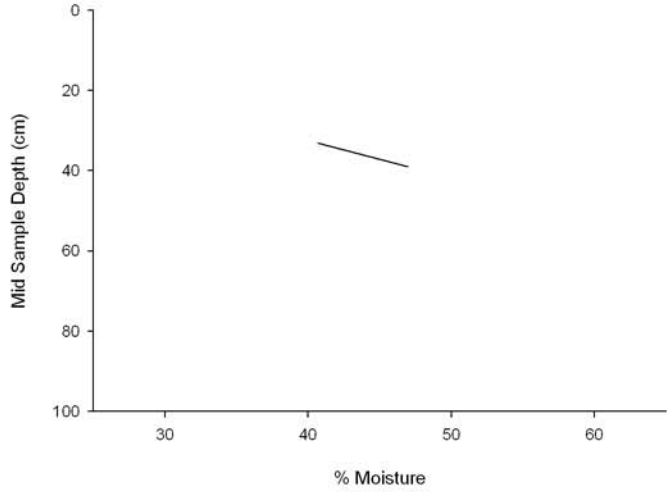
Core 8-1



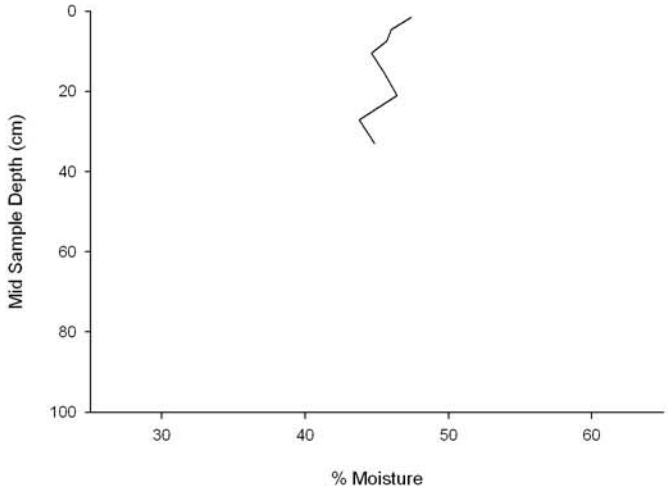
Core 8-1



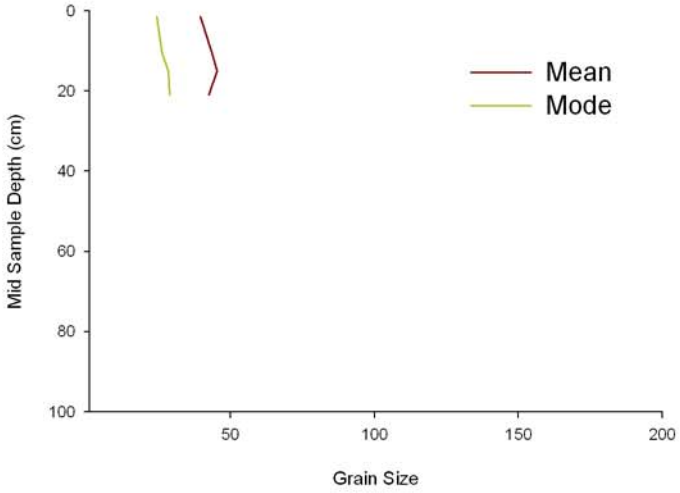
Core 8-2



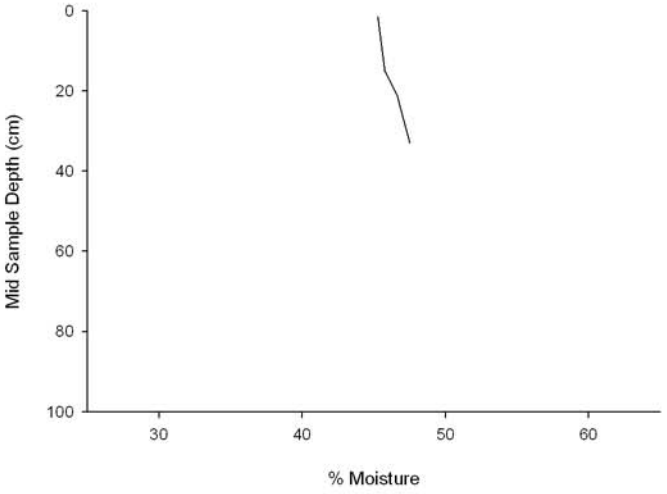
Core 9-1



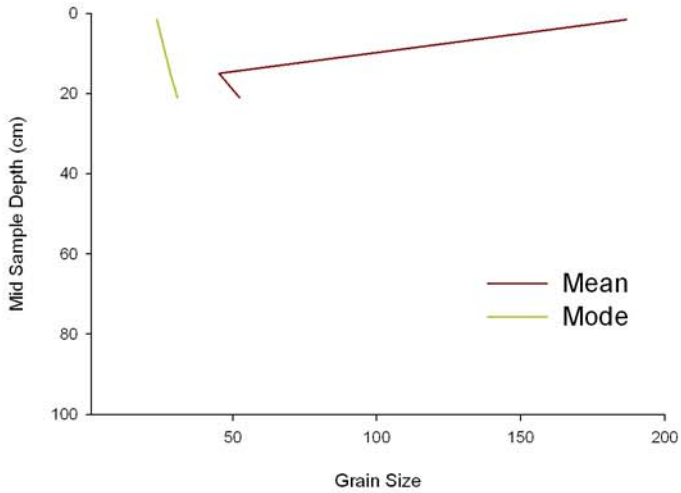
Core 9-1



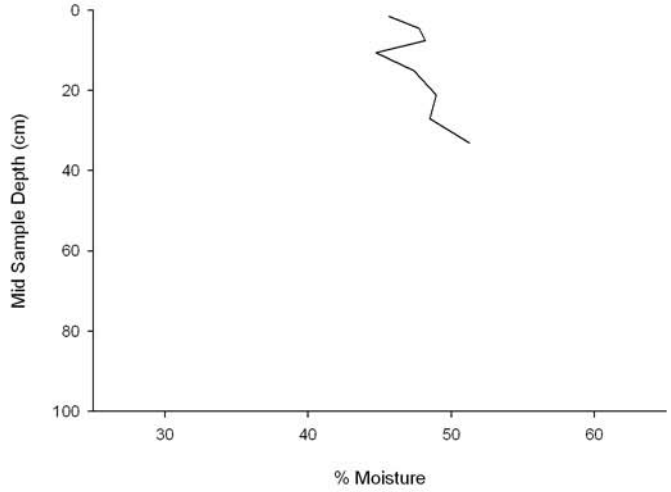
Core 10-1



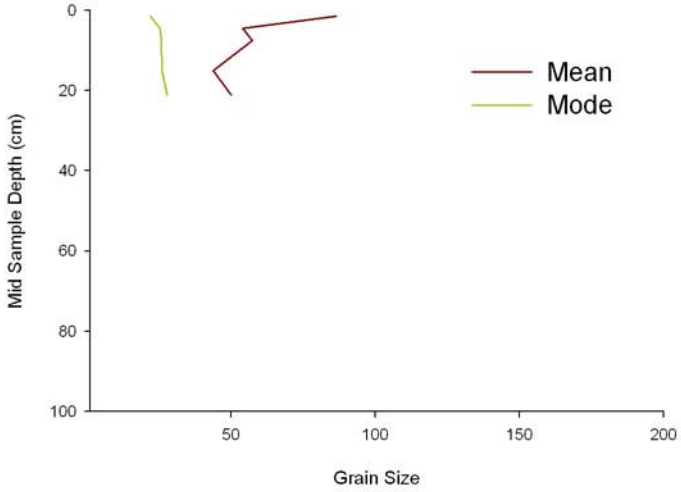
Core 10-1



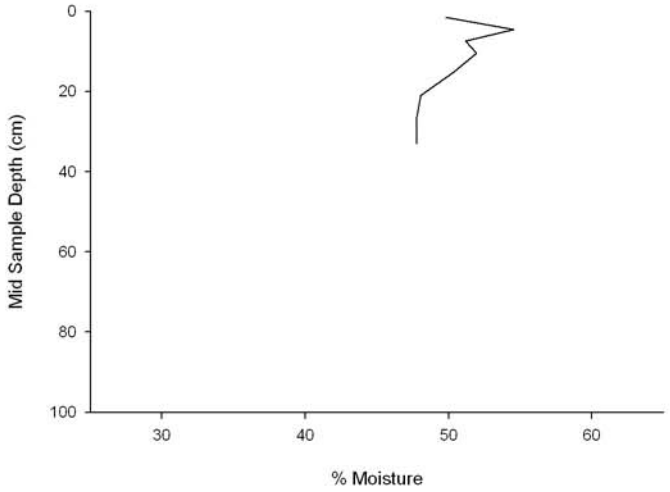
Core 11-1



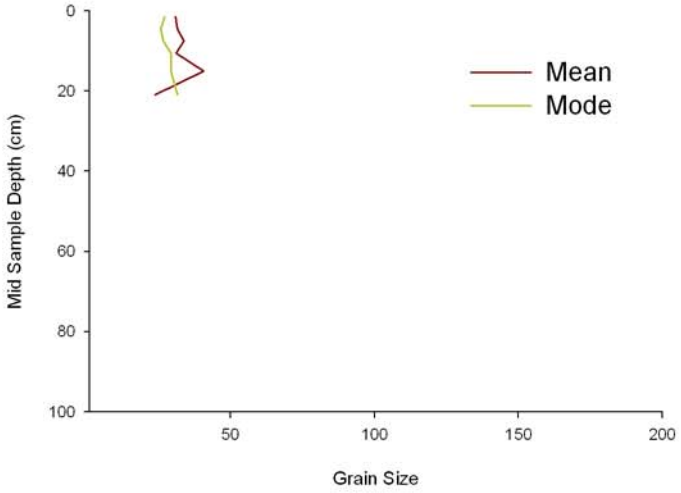
Core 11-1



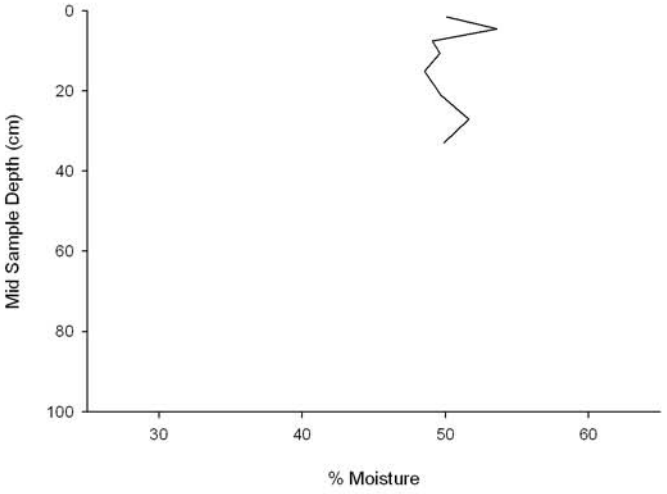
Core 12-1



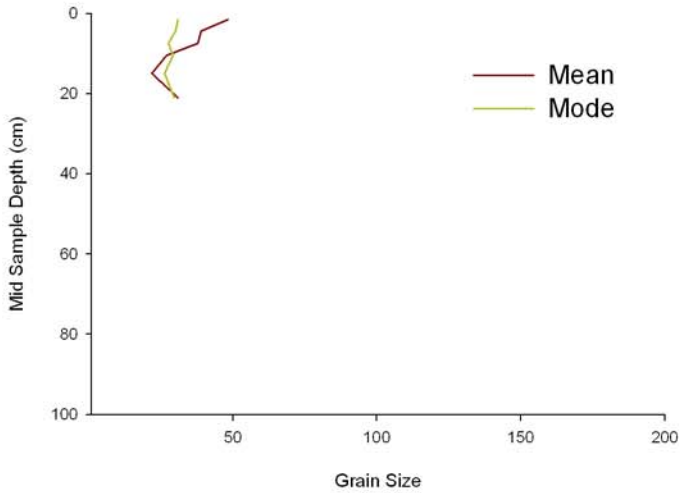
Core 12-1



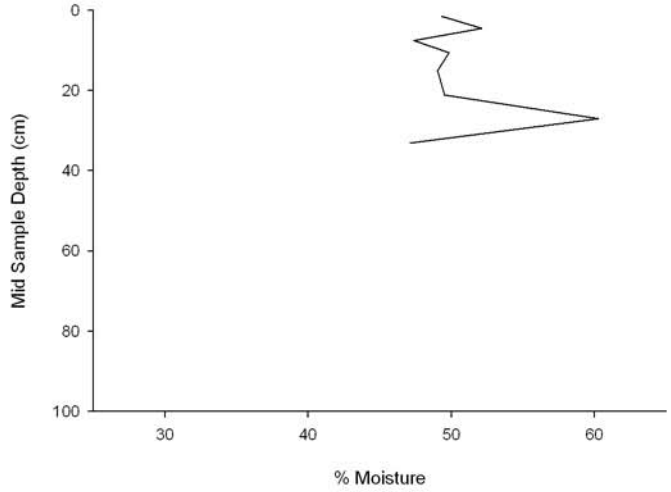
Core 13-1



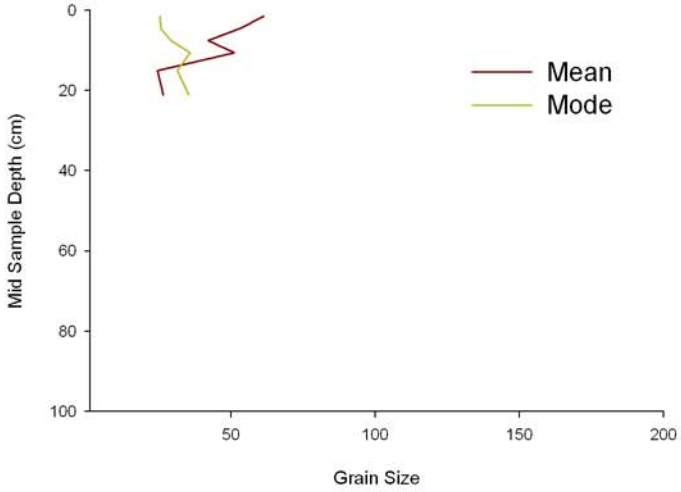
Core 13-1



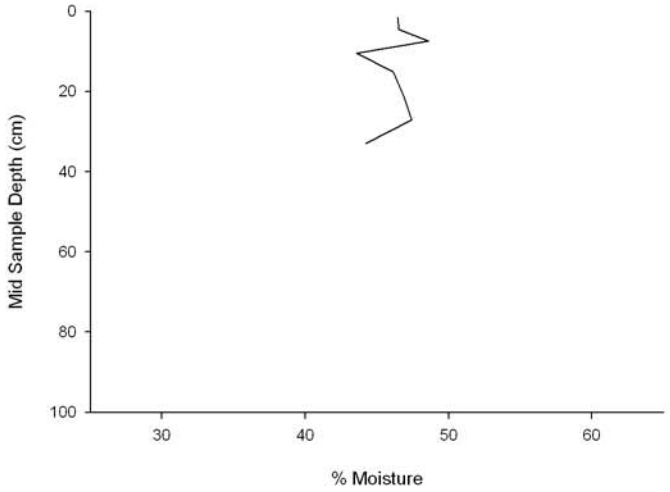
Core 14-1



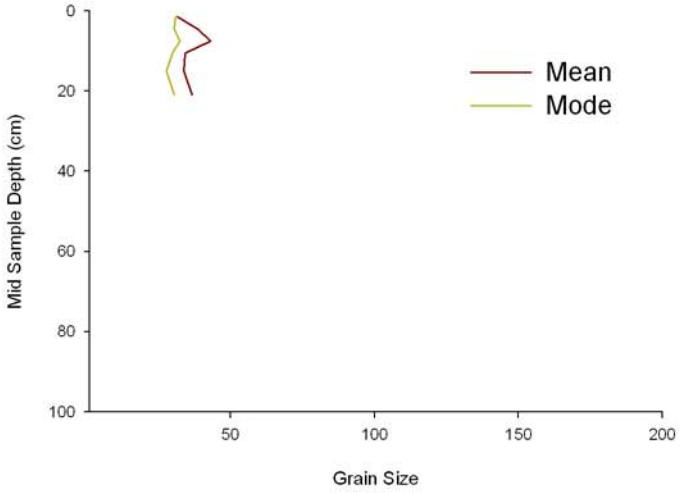
Core 14-1



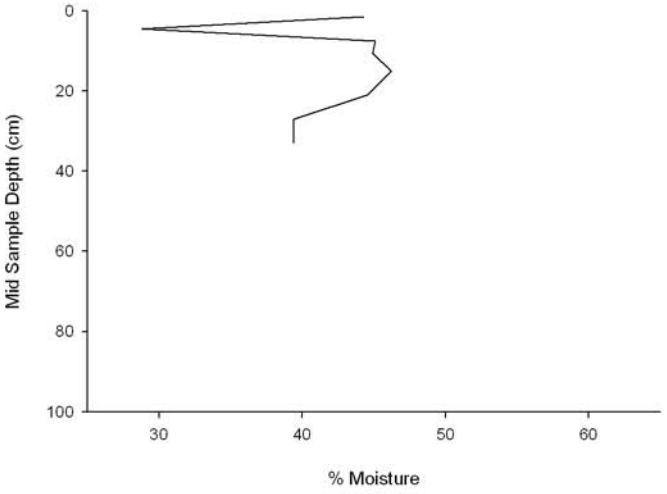
Core 15-1



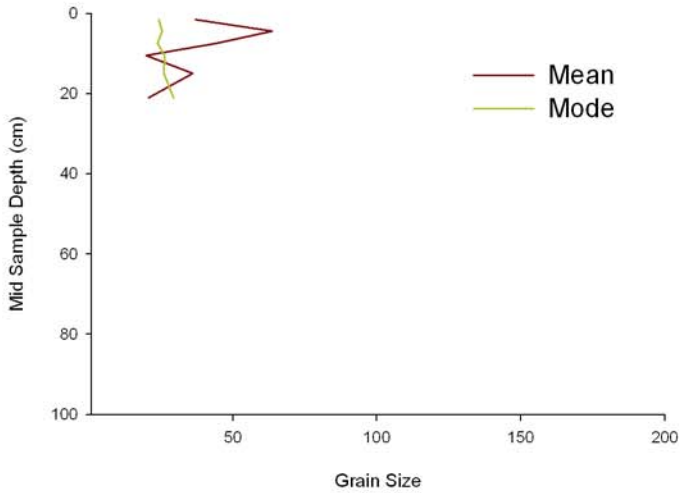
Core 15-1



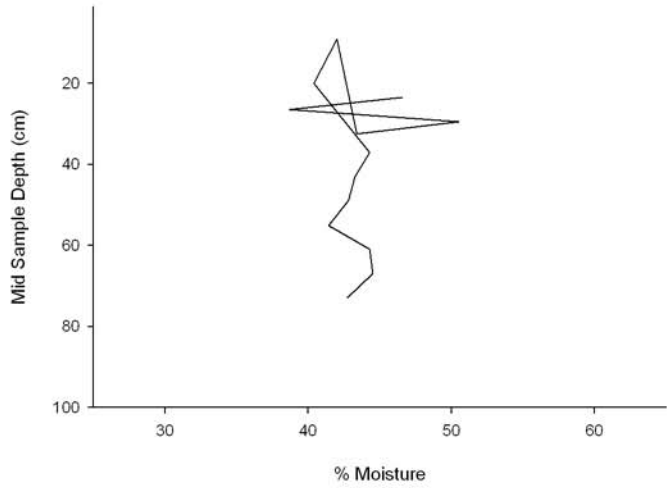
Core 16-1



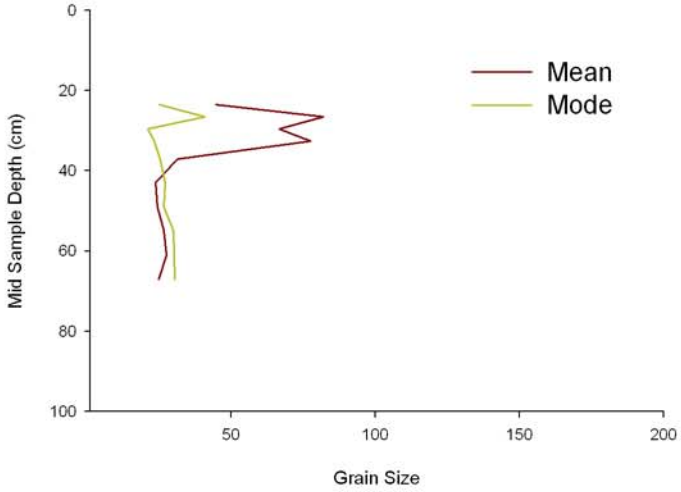
Core 16-1



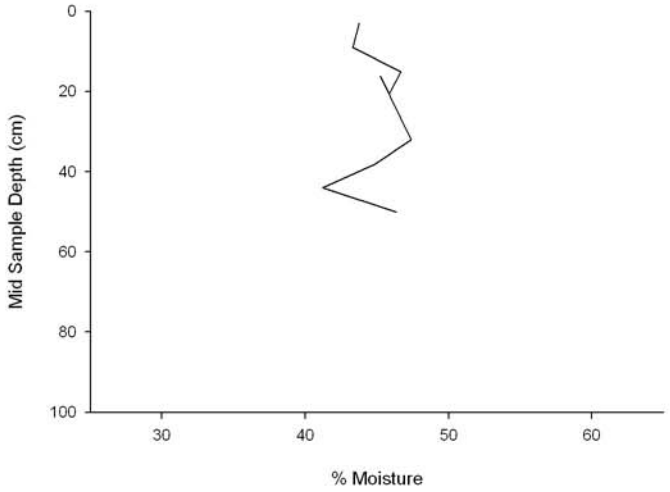
Core 17-1



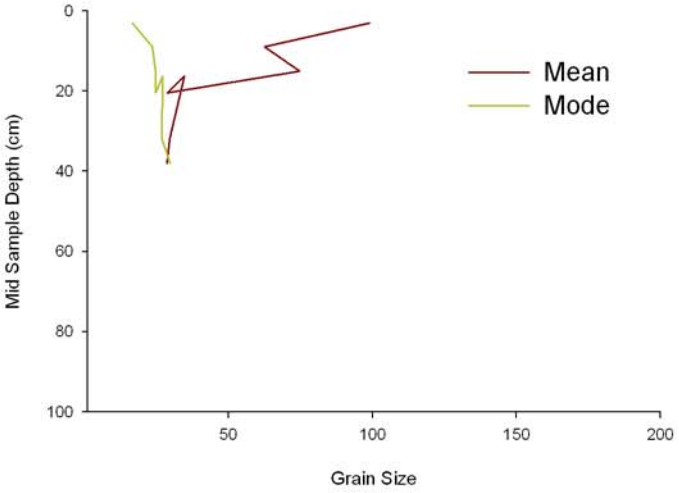
Core 14-1



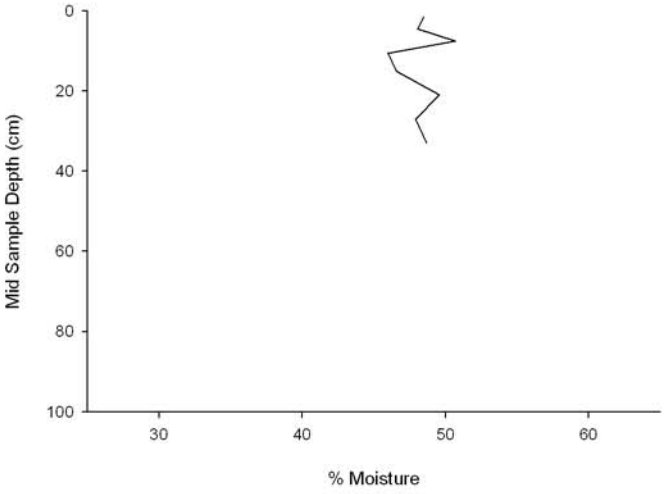
Core 18-1



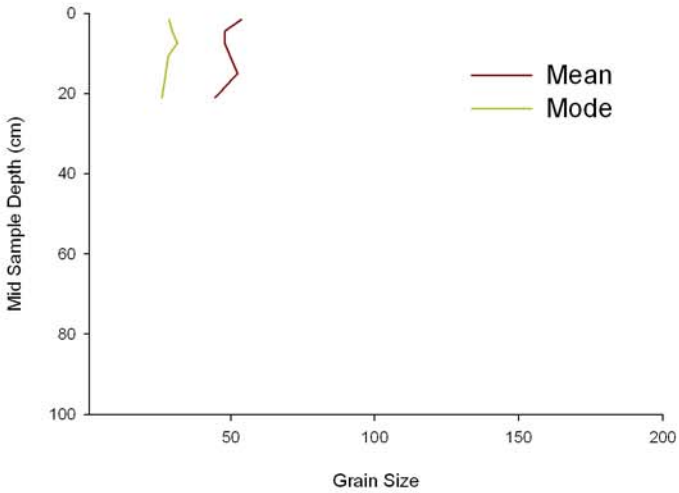
Core 18-1



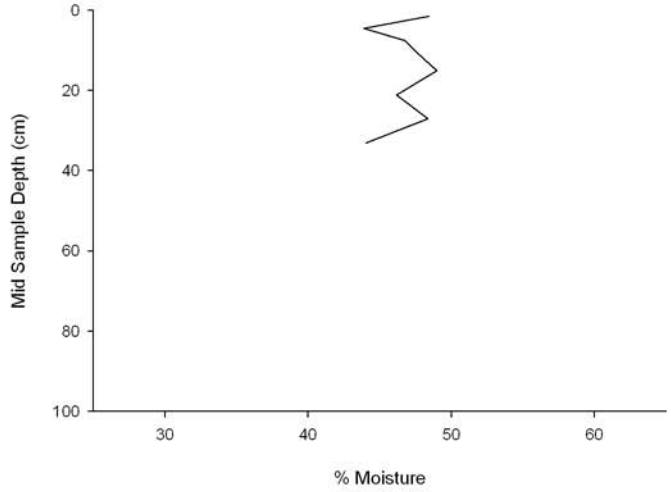
Core 19-1



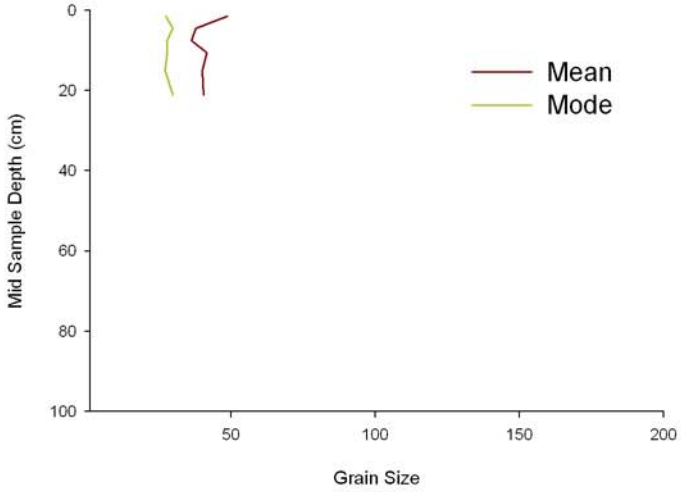
Core 19-1



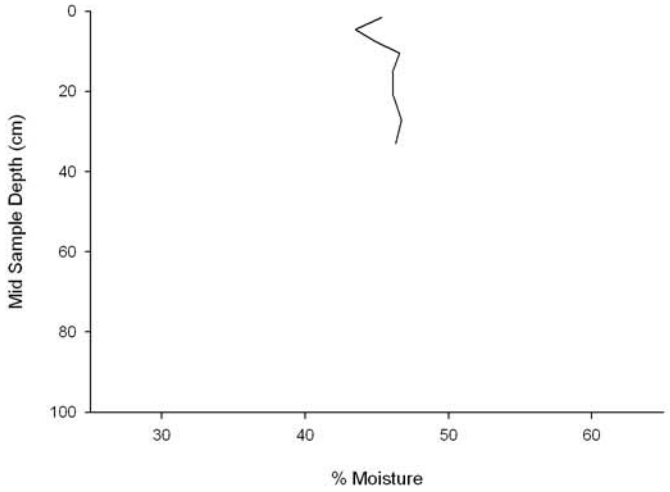
Core 20-1



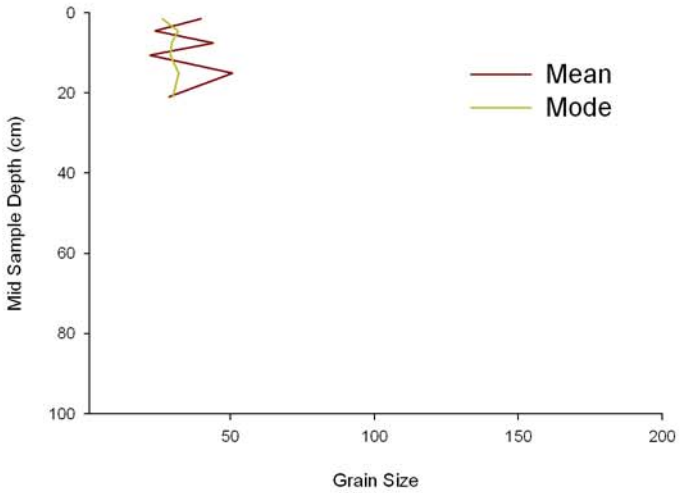
Core 20-1



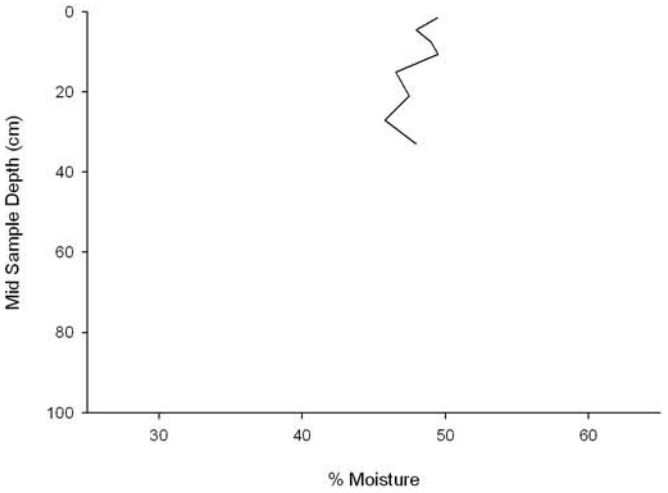
Core 21-1



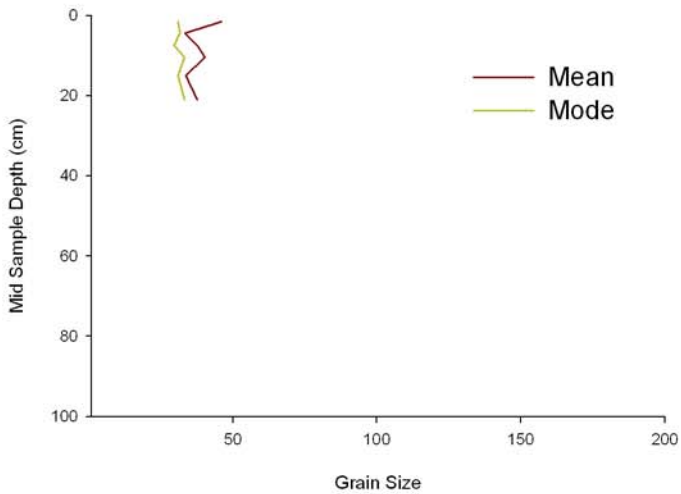
Core 21-1



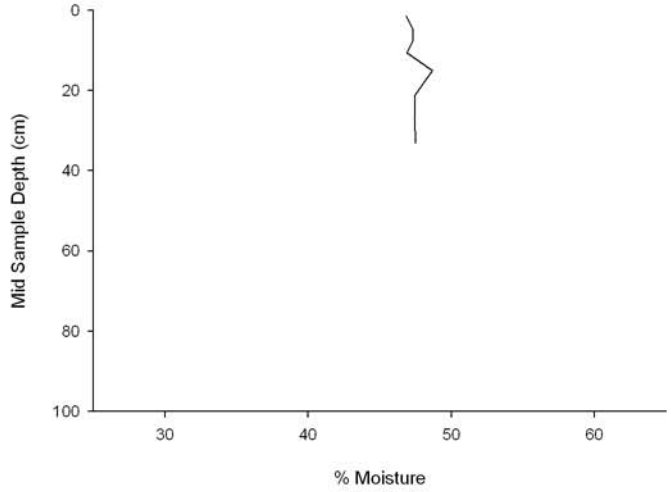
Core 22-1



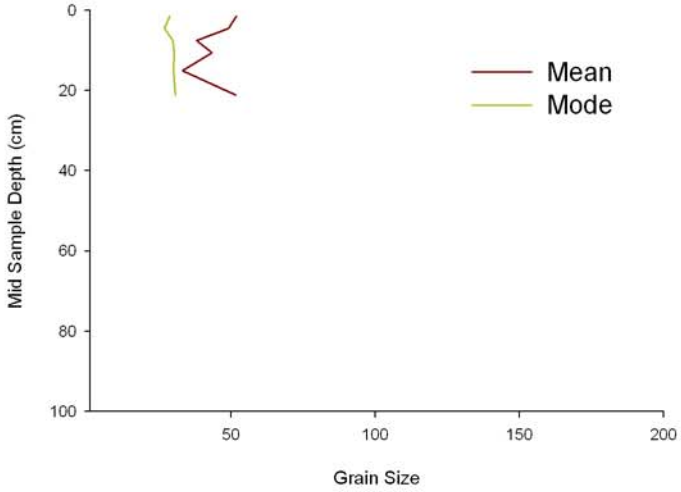
Core 22-1



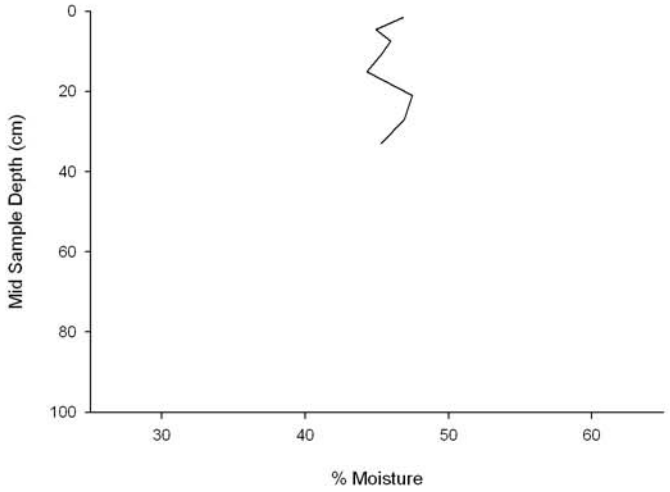
Core 23-1



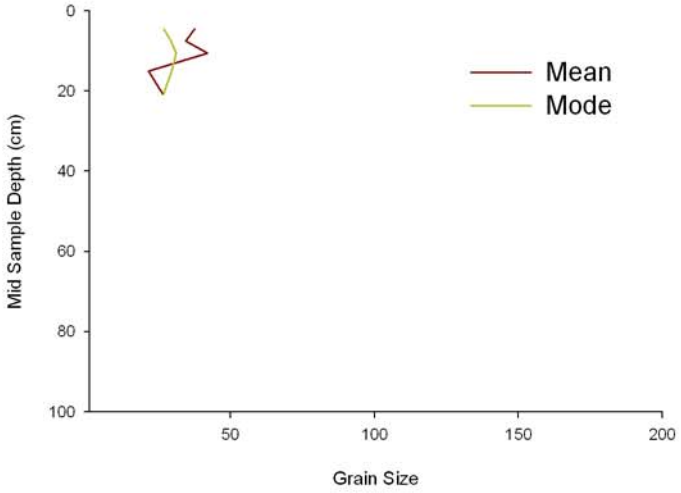
Core 23-1



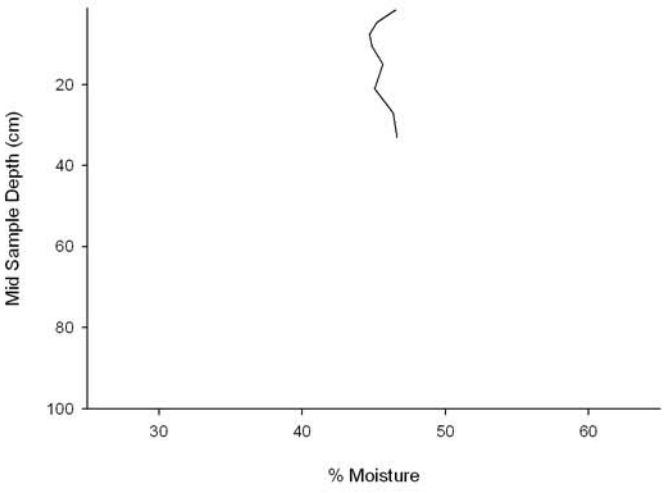
Core 24-1



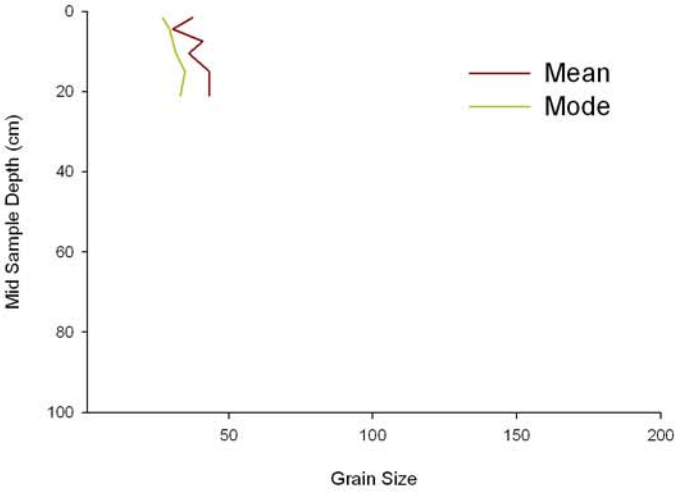
Core 24-1



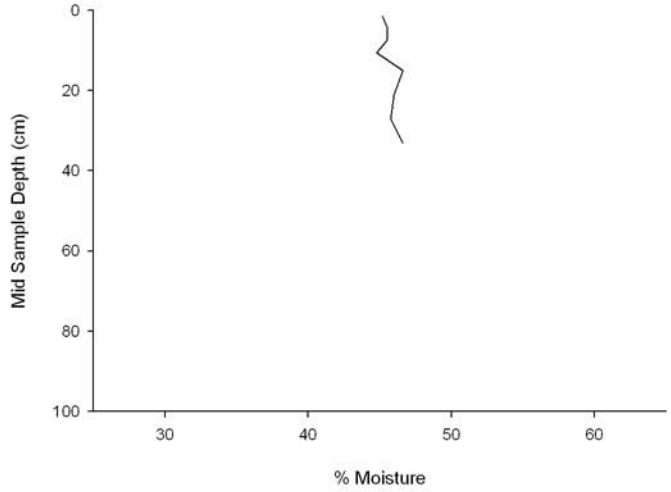
Core 25-1



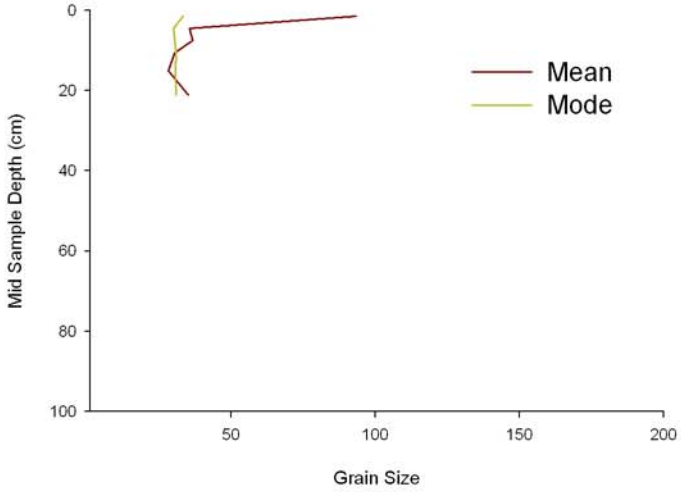
Core 25-1



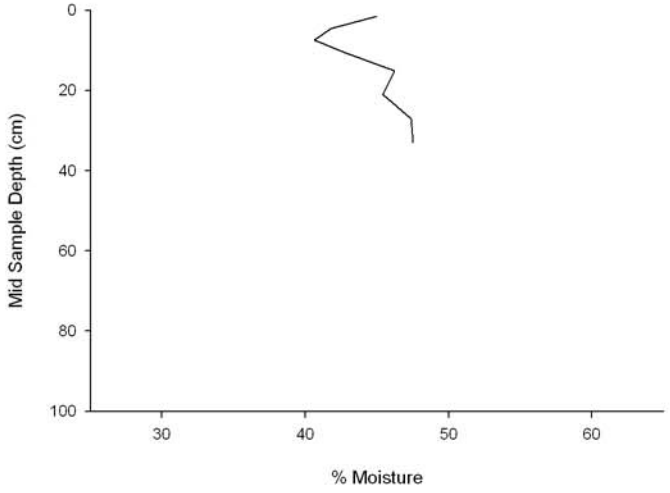
Core 26-1



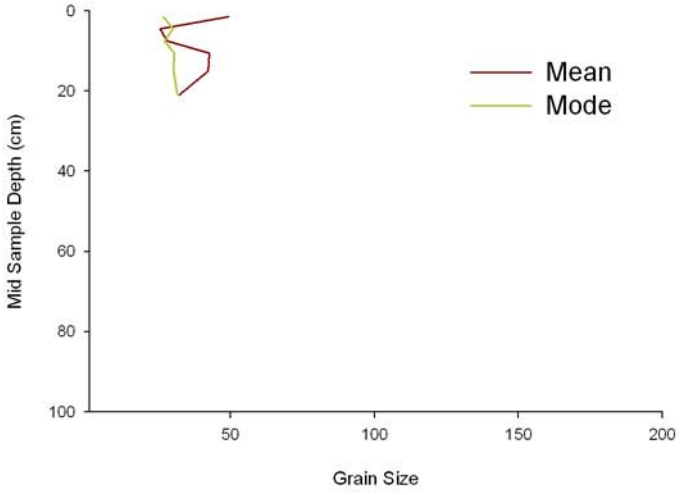
Core 23-1



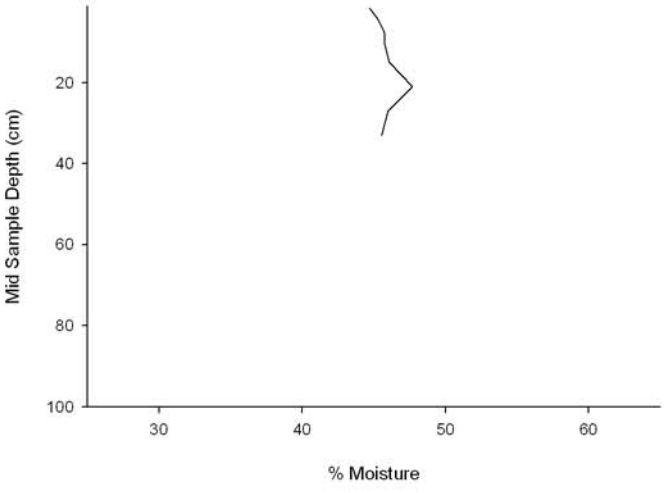
Core 27-1



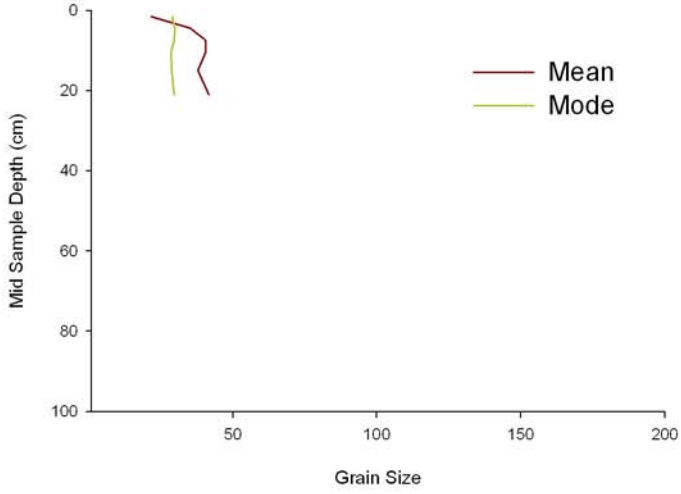
Core 27-1



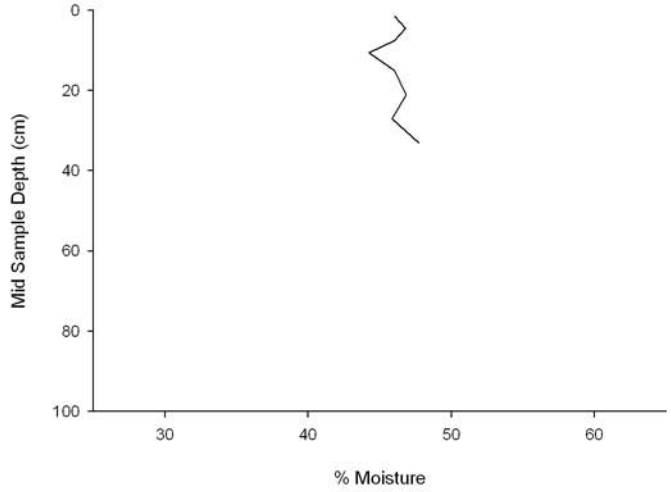
Core 28-1



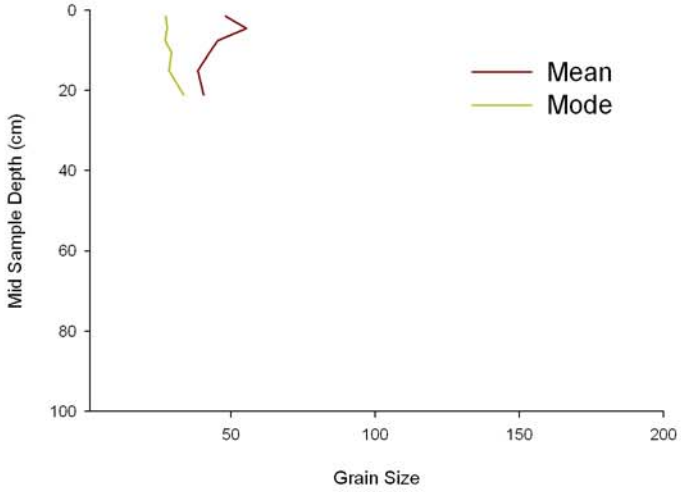
Core 28-1



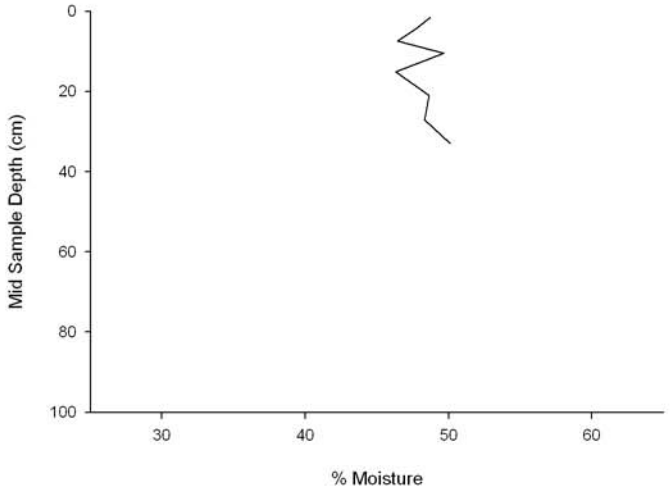
Core 29-1



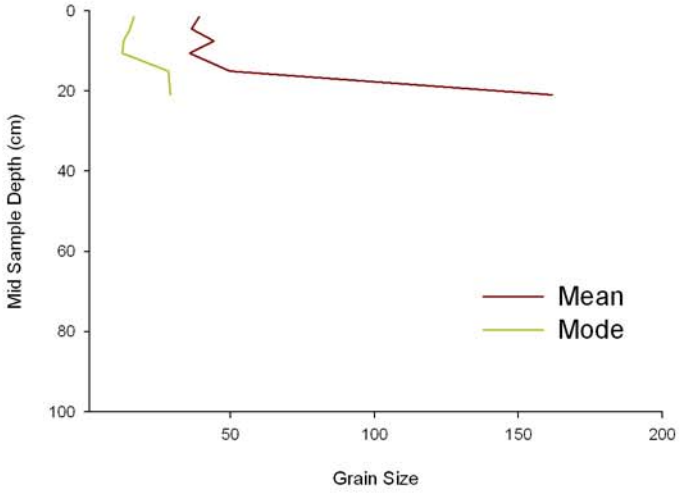
Core 29-1



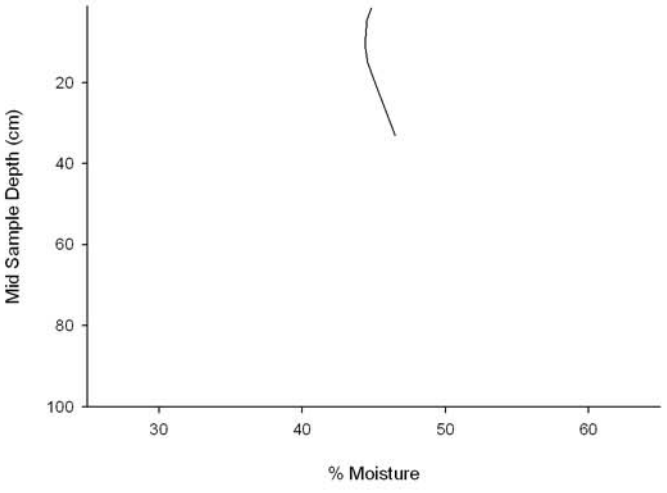
Core 30-1



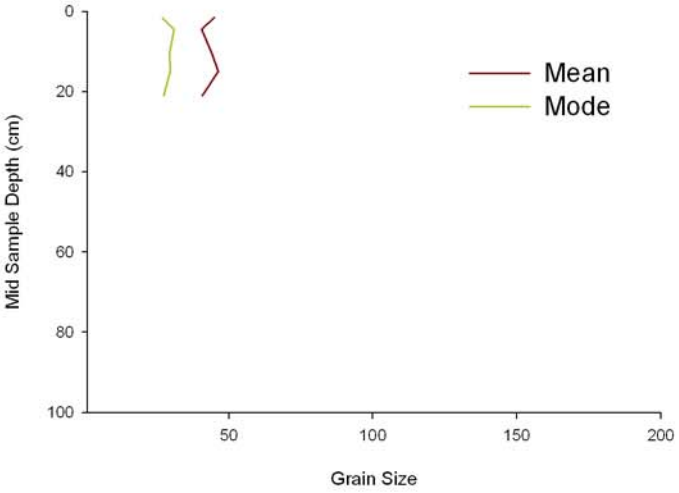
Core 30-1



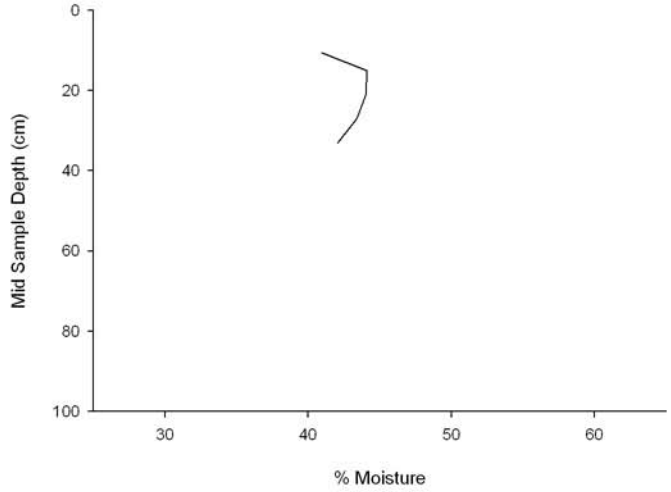
Core 31-1



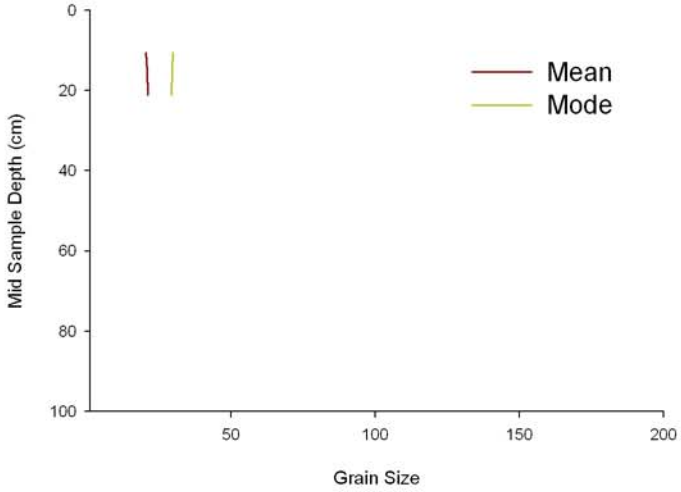
Core 31-1



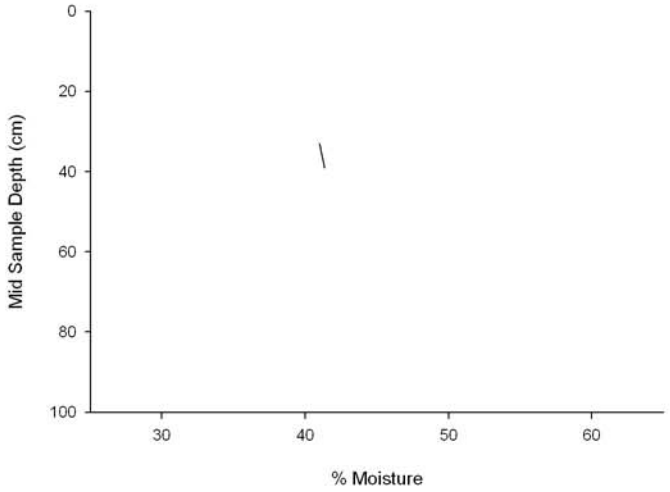
Core 32-1



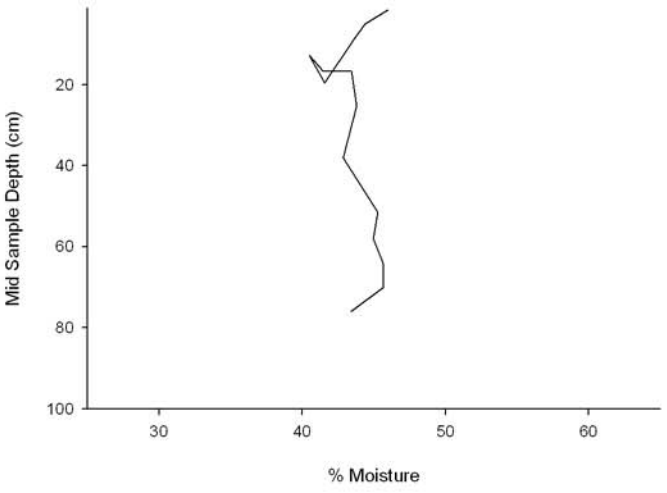
Core 32-1



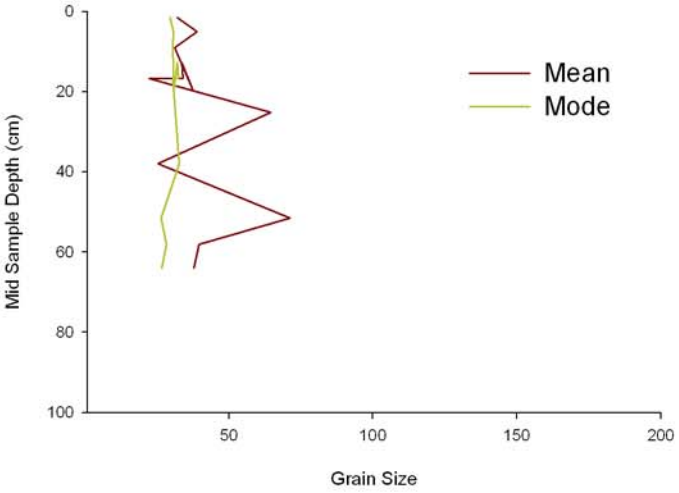
Core 33-1



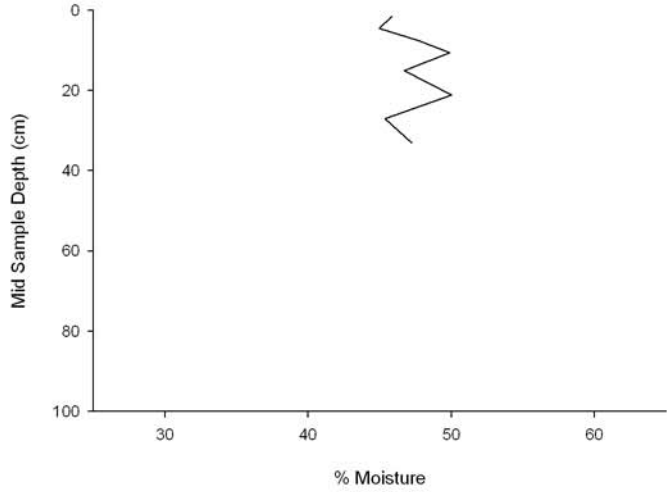
Core 34-1



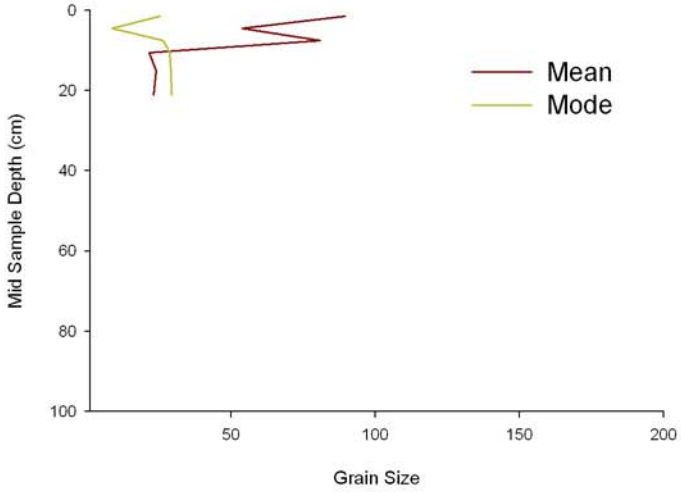
Core 34-1



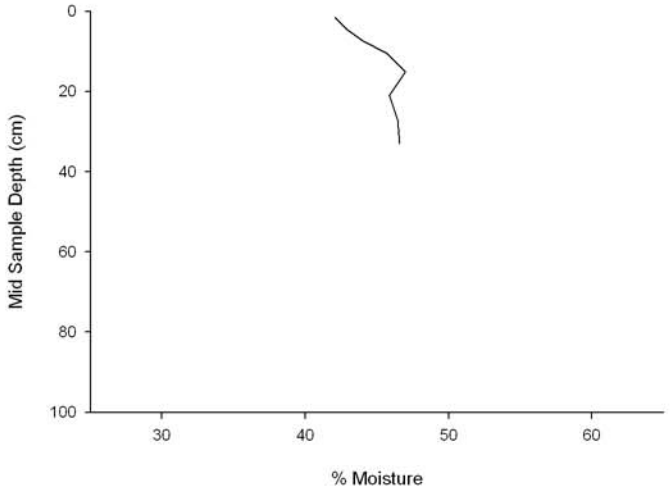
Core 35-1



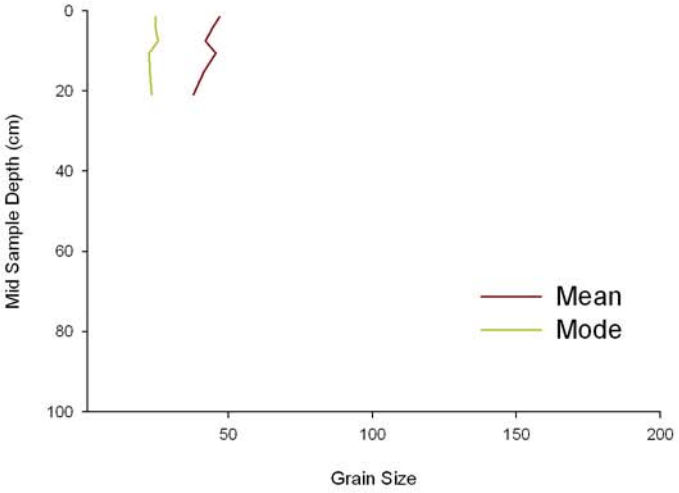
Core 35-1



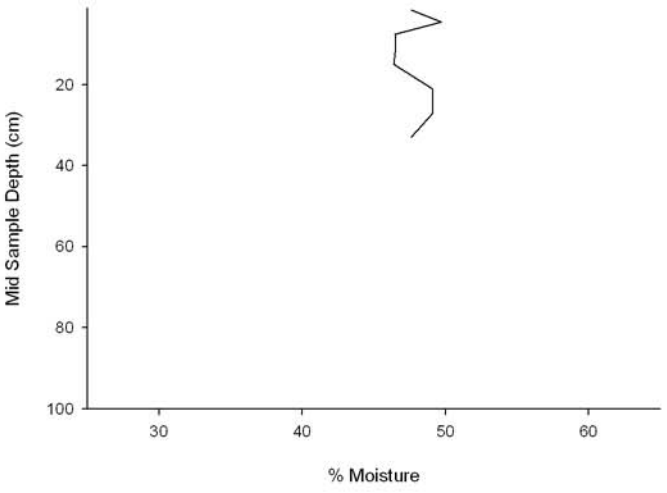
Core 36-1



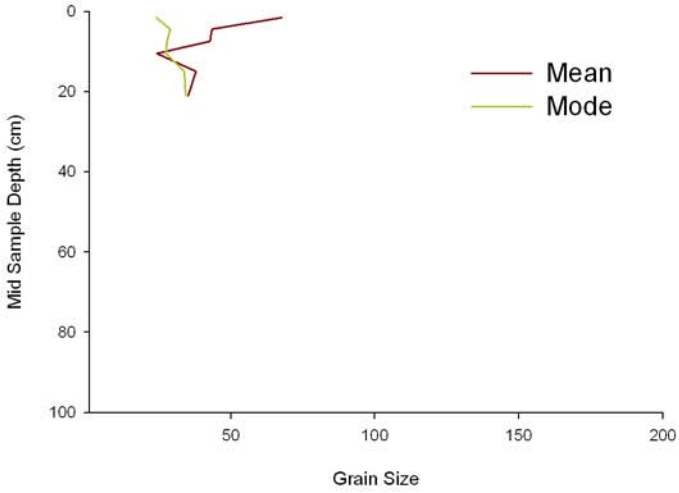
Core 36-1



Core 37-1



Core 37-1



Appendix F

Specific Gravity Data

Sample ID	Interval (cm)	Specific Gravity
01-6	0-6	2.64
01-6	6-12	2.64
01-6	12-18	2.63
01-6	18-24	2.62
02-6	0-6	2.64
02-6	6-12	2.62
02-6	12-18	2.63
02-6	18-24	2.60
3-3	6-12	2.62
3-3	0-6	2.64
3-3	12-18	2.61
3-3	18-24	2.71
4-2	0-6	2.62
4-2	6-12	2.61
4-2	12-18	2.63
4-2	18-24	2.63
5-3	0-6	2.65
5-3	0-6	2.67
5-3	6-12	2.64
5-3	12-18	2.69
5-3	18-24	2.65

Samples collected: July 14, 2009

Appendix G

Moisture Data

Core ID									
6-1	7-1	8-1	8-2	9-1	10-1	11-1	12-1	13-1	14-1
% Moisture (Core Interval [cm])									
44.8 (20-26)	45.7 (18-21)	45.5 (38-41)	40.6 (30-36)	47.4 (10-13)	45.3 (8-11)	45.6 (0.5-3.5)	49.8 (0-3)	50.1 (0-3)	49.3 (0.1-3.1)
49 (32-38)	45.8 (21-24)	44.8 (41-44)	46.9 (36-42)	46 (13-16)	45.8 (20-26)	47.7 (3.5-6.5)	54.5 (3-6)	53.6 (3-6)	52.1 (3.1-6.1)
48.3 (39-45)	44.5 (24-27)	45.3 (44-47)		45.7 (16-19)	46.6 (26-32)	48.2 (6.5-9.5)	51.2 (6-9)	49.1 (6-9)	47.4 (6.1-9.1)
48.5 (48-54)	43.5 (27-30)	45.7 (47-50)		44.6 (19-22)	47.1 (32-38)	44.7 (9.5-12.5)	52 (9-12)	49.6 (9-12)	49.8 (9.1-12.1)
46.7 (54-60)	44.8 (30-36)	45.9 (50-56)		45.5 (22-28)	47.5 (38-44)	47.3 (12.5-18.5)	50.4 (12-18)	48.6 (12-18)	49 (12.1-18.1)
45.4 (60-66)	45.5 (36-42)	46.6 (56-62)		46.4 (28-34)		48.9 (18.5-24.5)	48 (18-24)	49.7 (18-24)	49.5 (18.1-24.1)
45.5 (66-72)	44.5 (42-48)	46.9 (62-68)		43.8 (34-40)		48.5 (24.5-30.5)	47.8 (24-30)	51.6 (24-30)	60.2 (24.1-30.1)
46.2 (72-78)	42.7 (48-54)	47.7 (68-74)		44.8 (40-46)		51.2 (30.5-36.5)	47.8 (30-36)	49.9 (30-36)	47.1 (30.1-36.1)
46.5 (78-84)	43.7 (54-60)								
48.7 (84-90)	45.7 (60-66)								
46.6 (90-96)									

Core ID								
15-1	16-1	16-1*	16-2	17-1	18-1	19-1	20-1	21-1
% Moisture (Core Interval [cm])								
46.5 (8-11)	44.3 (0-3)	47.9 (0-6)	50.1 (0-3)	42 (0-18)	43.7 (5-11)	48.5 (11-14)	48.5 (0.8-3.8)	45.3 (3-6)
46.5 (11-14)	28.8 (3-6)	45.7 (12-18)	45.8 (3-9)	40.4 (18-22)	43.3 (11-17)	48 (14-17)	43.9 (3.8-6.8)	43.5 (6-9)
48.6 (14-17)	45.1 (6-9)	44.4 (24-30)	45.5 (9-15)	46.6 (22-25)	46.7 (17-23)	50.7 (17-20)	46.7 (6.8-9.8)	44.8 (9-12)
43.6 (17-20)	44.9 (9-12)	44.5 (30-36)	45.9 (15-21)	38.7 (25-28)	45.9 (23-28)	46 (20-23)	47.6 (9.8-12.8)	46.6 (12-15)
46.1 (20-26)	46.2 (12-18)		45.2 (24-30)	50.5 (28-31)	45.2 (28-34.5)	46.6 (23-29)	49 (12.8-18.8)	46.1 (15-21)
46.9 (26-32)	44.6 (18-24)		44.6 (30-36)	43.4 (31-34)	47.4 (34.5-40)	49.6 (29-35)	46.2 (18.8-24.8)	46.1 (21-27)
47.4 (32-38)	39.4 (24-30)		46.1 (36-42)	44.3 (34-40)	44.9 (40-46)	47.9 (35-41)	48.4 (24.8-30.8)	46.7 (27-33)
44.2 (38-44)	39.4 (30-36)		45.4 (42-48)	43.3 (40-46)	41.2 (46-52)	48.7 (41-47)	44 (30.8-36.8)	46.3 (33-39)
			43 (48-54)	42.8 (46-52)	46.3 (52-58)			
			43.7 (54-60)	41.4 (52-58)				
			41.6 (60-66)	44.3 (58-64)				
			43.2 (66-72)	44.5 (64-70)				
			42.3 (72-78)	42.7 (70-76)				
			41.6 (90-96)	42.4 (76-82)				

*T-Series

Core ID							
22-1	23-1	24-1	25-1	26-1	27-1	28-1	29-1
% Moisture (Core Interval [cm])							
49.4 (3.5-6.5)	46.8 (10-13)	46.9 (13-16)	46.5 (12-15)	45.2 (2-5)	45 (7-10)	44.7 (0-3)	46 (0.1-3.1)
47.9 (6.5-9.5)	47.3 (13-16)	44.9 (16-19)	45.2 (15-18)	45.5 (5-8)	41.8 (10-13)	45.3 (3-6)	46.8 (3.1-6.1)
49 (9.5-12.5)	47.3 (16-19)	45.9 (19-22)	44.7 (18-21)	45.5 (8-11)	40.6 (13-16)	45.7 (6-9)	46 (6.1-9.1)
49.5 (12.5-15.5)	46.9 (19-22)	45.4 (22-25)	44.9 (21-24)	44.8 (11-14)	42.7 (16-19)	45.8 (9-12)	44.2 (9.1-12.1)
46.5 (15.5-21.5)	48.7 (22-28)	44.3 (25-31)	45.6 (24-30)	46.6 (14-20)	46.2 (19-25)	46.1 (12-18)	46 (12.1-18.1)
47.5 (21.5-27.5)	47.4 (28-34)	47.5 (31-37)	45.1 (30-36)	46 (20-26)	45.4 (25-31)	47.7 (18-24)	46.8 (18.1-24.1)
45.8 (27.5-33.5)	47.4 (34-40)	46.9 (37-43)	46.3 (36-42)	45.8 (26-32)	47.4 (31-37)	46 (24-30)	45.8 (24.1-30.1)
48 (33.5-39.5)	47.5 (40-46)	45.3 (43-49)	46.6 (42-48)	46.6 (32-38)	47.5 (37-43)	45.5 (30-36)	47.7 (30.1-36.1)
			46.8 (0-6)				
			45.1 (6-12)				

Core ID							
30-1	31-1	32-1	33-1	34-1	35-1	36-1	37-1
% Moisture (Core Interval [cm])							
48.8 (0-3)	44.8 (15-18)	40.9 (9-12)	41 (30-36)	46 (7-10)	45.8 (0.1-3.1)	42.1 (18-21)	47.6 (0.3-3.3)
47.6 (3-6)	44.5 (18-21)	44.1 (12-18)	41.4 (36-42)	44.4 (10-14)	45 (3.1-6.1)	42.9 (21-24)	49.7 (3.3-6.3)
46.5 (6-9)	44.4 (21-24)	44 (18-24)		43.6 (14-18)	47.7 (6.1-9.1)	44 (24-27)	46.5 (6.3-9.3)
49.7 (9-12)	44.6 (24-27)	43.4 (24-30)		41.6 (18-25)	49.9 (9.1-12.1)	45.7 (27-30)	46.5 (9.3-12.3)
46.3 (12-18)	45.2 (27-33)	42.1 (30-36)		40.5 (25-28)	46.7 (12.1-18.1)	47 (30-36)	46.4 (12.3-18.3)
48.6 (18-24)	46.5 (33-39)			41.5 (28-31.5)	50 (18.1-24.1)	45.9 (36-42)	49.1 (18.3-24.3)
48.3 (24-30)				43.4 (31.5-36.5)	45.3 (24.1-30.1)	46.4 (42-48)	49.1 (24.3-30.3)
50.1 (30-36)				42.8 (36.5-41.5)	47.2 (30.1-36.1)	46.6 (48-54)	47.6 (30.3-36.3)
				43.8 (41.5-49)			
				45.3 (49-55.5)			
				45 (55.5-62)			
				45.6 (62-68)			
				45.7 (67-73)			
				43.4 (73-79)			

Appendix H

Shear Strength Data

US Army Corps of Engineers® New England District

Massachusetts Bay Disposal Site
Capping Demonstration
Shear Data

AECOM

Core ID	1-3	1-4	1-5	2-5	3-1	3-2	4-1	5-1	5-2	6-1*	7-1*	8-1*	8-2	9-1*
Interval (cm)	Maximum Shear (Kg/cm^2)													
0-6	0.014	0.010	0.004	0.008	0.014	0.010	0.008	0.004	0.014					
6-12	0.014	0.018	0.014	0.030	0.020	0.016	0.024	0.014	0.028					0.052 (10-16)
12-18	0.016	0.028	0.024	0.040	0.026	0.024	0.032	0.026	0.028					0.046 (16-22)
18-24	0.028	0.030	0.032	0.056	0.026	0.040	0.052	0.036	0.028					0.046 (22-28)
24-30	0.028	0.028	0.040	0.040	0.022	0.046		0.030	0.032					0.05 (28-34)
30-36	0.030	0.028			0.028			0.042			0.028 (34-40)		0.040	0.048 (34-40)
36-42	0.030	0.048			0.042			0.034			0.036 (40-46)		0.030	0.054 (40-46)
42-48	0.036	0.040			0.040			0.040		0.05 (40-46)	0.044 (46-52)			
48-54	0.040	0.040			0.050						0.04 (52-58)			
54-60	0.042	0.046						0.042		0.06 (52-58)	0.048 (58-64)			
60-66	0.046	0.046			0.054			0.056		0.062 (58-65)	0.056 (64-70)			
66-72	0.042	0.040			0.062			0.052		0.076 (68-74)	0.048 (70-76)			
72-78	0.048	0.044			0.056			0.050		0.07 (74-80)	0.05 (76-82)	0.038 (73-79)		
78-84	0.042	0.044			0.050			0.054		0.07 (80-86)		0.03 (79-85)		
84-90	0.052	0.044			0.046			0.050		0.07 (86-92)		0.042 (85-91)		
90-96	0.052	0.048			0.060			0.052		0.072 (92-98)		0.032 (91-97)		
96-102	0.056	0.050			0.056			0.052		0.072 (98-104)		0.032 (97-103)		
102-108	0.056	0.038			0.066			0.054		0.07 (104-110)		0.046 (103-109)		
108-114	0.068	0.060			0.076			0.070		0.08 (110-116)				
114-120	0.056	0.060			0.062			0.070						
120-126	0.074	0.050			0.054			0.070						

*Cores with intervals of irregular segments; actual interval in parentheses

Core ID	10-1*	11-1*	12-1	13-1	14-1*	15-1*	16-1	16-2*	17-1*
Interval (cm)	Maximum Shear (Kg/cm^2)								
0-6		0.028 (0.5-6.5)	0.012	0.016	0.02 (0.1-6.1)		0.0	0.004 (0.5-6.5)	
6-12	0.036 (8-14)	0.03 (6.5-12.5)	0.020	0.03	0.026 (6.1-12.1)	0.026 (8-14)	0.01	0.006 (6.5-12.5)	
12-18	0.04 (14-20)	0.042 (12.5-18.5)	0.026	0.024	0.036 (12.1-18.1)	0.026 (14-20)	0.012	0.01 (12.5-18.5)	
18-24	0.04 (20-26)	0.046 (18.5-24.5)	0.024	0.03	0.036 (18.1-24.1)	0.03 (20-26)	0.02	0.026 (24.5-30.5)	
24-30	0.044 (26-32)	0.048 (24.5-30.5)	0.032	0.038	0.04 (24.1-30.1)	0.032 (26-32)	0.02	0.028 (30.5-36.5)	
30-36	0.044 (32-38)	0.048 (30.5-36.5)	0.040	0.03	0.044 (30.1-36.1)	0.038 (32-38)	0.024	0.028 (36.5-42.5)	
36-42	0.052 (38-44)					0.04 (38-44)	0.026	0.03 (42.5-48.5)	
42-48							0.032	0.036 (48.5-54.5)	0.018 (43-49)
48-54							0.032	0.032 (54.5-60.5)	0.024 (49-55)
54-60							0.038	0.036 (60.5-66.5)	0.024 (55-61)
60-66							0.038	0.04 (66.5-72.5)	0.024 (61-67)
66-72							0.038	0.046 (72.5-78.5)	0.03 (67-73)
72-78								0.052 (78.5-84.5)	0.034 (73-79)
78-84								0.046 (84.5-90.5)	0.042 (79-85)
84-90								0.05 (90.5-96.5)	0.032 (85-91)
90-96									0.038 (91-97)
96-102									0.038 (97-103)
102-108									
108-114									
114-120									
120-126									

*Cores with intervals of irregular segments; actual interval in parentheses

Core ID	18-1*	19-1*	20-1*	21-1*	22-1*	23-1*	24-1*	25-1
Interval (cm)	Maximum Shear (Kg/cm^2)							
0-6			0.012 (0.8-6.8)	0.012 (3-9)	0.016 (3.5-9.5)			
6-12	0.004 (5-11)		0.02 (6.8-12.8)	0.018 (9-15)	0.018 (9.5-15.5)	0.026 (10-16)		
12-18	0.01 (11-17)	0.014 (10-16)	0.024 (12.8-18.8)	0.022 (15-21)	0.028 (15.5-21.5)	0.03 (16-22)	0.03 (13-19)	0.008
18-24	0.014 (17-23)	0.02 (16-22)	0.028 (18.8-24.8)	0.024 (21-27)	0.03 (21.5-27.5)	0.03 (22-28)	0.034 (19-25)	0.016
24-30	0.018 (23-28)	0.024 (22-28)	0.024 (24.8-30.8)	0.028 (27-33)	0.03 (27.5-33.5)	0.032 (28-34)	0.05 (25-31)	0.022
30-36	0.024 (28-34.5)	0.03 (28-34)	0.028 (30.8-36.8)	0.028 (33-39)	0.034 (33.5-39.5)	0.032 (34-40)	0.046 (31-37)	0.03
36-42	0.024 (34.5-40)	0.026 (34-40)				0.044 (40-46)	0.05 (37-43)	0.03
42-48	0.026 (40-46)	0.032 (40-46)					0.05 (43-49)	0.03
48-54	0.026 (46-52)							0.034
54-60	0.028 (52-58)							0.032
60-66								
66-72								
72-78								
78-84								
84-90								
90-96								
96-102								
102-108								
108-114								
114-120								
120-126								

*Cores with intervals of irregular segments; actual interval in parentheses

Core ID	26-1*	27-1*	28-1	29-1*	30-1	31-1*	32-1*	33-1	34-1*
Interval (cm)	Maximum Shear (Kg/cm²)								
0-6	0.022 (2-8)			0.026 (0.1-6.1)	0.012				
6-12	0.026 (8-14)	0.024 (7-13)	0.014	0.026 (6.1-12.1)	0.02		0.02 (9-15)		0.034 (10-16)
12-18	0.036 (14-20)	0.03 (13-19)	0.02	0.026 (12.1-18.1)	0.024	0.038 (15-21)	0.024 (15-21)		
18-24	0.032 (20-26)	0.036 (19-25)	0.024	0.03 (18.1-24.1)	0.03	0.044 (21-27)	0.028 (21-27)		0.044 (25-31.5)
24-30	0.036 (26-32)	0.04 (25-31)	0.028	0.036 (24.1-30.1)	0.034	0.05 (27-33)	0.03 (27-33)		0.038 (31.5-36.5)
30-36	0.04 (32-38)	0.04 (31-37)	0.028	0.038 (30.1-36.1)	0.03	0.052 (33-39)	0.036 (33-39)	0.072	0.036 (36.5-41.5)
36-42		0.038 (37-43)	0.03			0.052 (39-45)		0.064	0.044 (41.5-49)
42-48						0.05 (45-51)			0.04 (49-55.5)
48-54									0.042 (55.5-62)
54-60									0.042 (62-68)
60-66									0.04 (68-74)
66-72									
72-78									
78-84									
84-90									
90-96									
96-102									
102-108									
108-114									
114-120									
120-126									

*Cores with intervals of irregular segments; actual interval in parentheses

Core ID	35-1*	36-1	37-1*
Interval (cm)	Maximum Shear (Kg/cm^2)		
0-6	0.014 (0.1-6.1)		0.04 (0.3-6.3)
6-12	0.014 (6.1-12.1)		0.046 (6.3-12.3)
12-18	0.018 (12.1-18.1)		0.046 (12.3-18.3)
18-24	0.02 (18.1-24.1)	0.028	0.048 (18.3-24.3)
24-30	0.026 (24.1-30.1)	0.032	0.064 (24.3-30.3)
30-36	0.03 (30.1-36.1)	0.036	0.06 (30.3-36.3)
36-42		0.036	
42-48		0.030	
48-54		0.036	
54-60			
60-66			
66-72			
72-78			
78-84			
84-90			
90-96			
96-102			
102-108			
108-114			
114-120			
120-126			

*Cores with intervals of irregular segments; actual interval in parentheses

Appendix I

^{210}Pb Data Table

Core Sample	210Pb (dpm/g)	Standard Deviation	Depth (cm)
6-1-D	2.94	0.31	31
7-1-C/D	3.13	0.37	9
8-1-A/B	3.65	0.41	3
9-1-C/D	3.31	0.37	9
10-1-C/D	2.58	0.30	9
11-1-C/D	3.34	0.33	9
11-1-E	2.78	0.31	15
12-1-A/B	4.93	0.48	3
12-1-E	3.09	0.43	15
12-1-F	3.99	0.41	21
12-1-G	3.11	0.33	27
12-1-H	3.15	0.33	33
13-1-C/D	3.92	0.36	9
13-1-F	4.70	0.50	21
13-1-H	3.24	0.34	33
14-1-A/B	6.82	0.51	3
14-1-C/D	3.12	0.49	9
14-1-E	2.95	0.30	15
15-1-A/B	3.35	0.47	3
16-1-A/B	3.36	0.28	3
16-1-C/D	4.16	0.49	9
16-2-E	4.10	0.47	27
17-1-E	5.81	0.50	15
17-1-F	5.66	0.59	21
17-1-G	4.21	0.49	27
18-1-G	4.33	0.48	27
19-1-G	4.37	0.50	27
20-1-G	3.92	0.45	27
20-1-H	3.84	0.53	33
21-1-C/D	3.95	0.51	9
21-1-E	3.96	0.41	15
21-1-G	3.45	0.42	27
22-1-E	4.44	0.44	15
22-1-F	4.76	0.56	21
23-1-F	3.22	0.38	21
24-1-A/B	3.27	0.32	3
25-1-E	3.03	0.30	15
25-1-F	3.78	0.49	21
26-1-C/D	3.44	0.86	9
26-1-E	3.92	0.46	15
26-1-F	4.68	0.48	21
26-1-G	3.77	0.40	27
27-1-F	4.11	0.48	21
27-1-G	2.70	0.30	27
28-1-C/D	3.84	0.47	9
28-1-E	3.45	0.40	15
29-1-F	3.66	0.60	21
29-1-G	4.04	0.44	27
30-1-A/B	4.60	0.47	3
30-1-F	3.39	0.36	21
30-1-G	3.81	0.39	27
30-1-H	3.81	0.55	33
31-1-A/B	5.11	0.58	3
32-1-E	4.17	0.48	15
34-1-B	4.85	0.53	5
34-1-D	5.20	0.56	14
34-1-I	3.86	0.26	38
34-1-L	2.90	0.34	58
35-1-G	3.70	0.42	27
35-1-H	3.02	0.56	33
36-1-A/B	5.04	0.55	3
37-1-C/D	4.73	0.54	9
37-1-E	2.41	0.28	15

Appendix J

Carbon-Hydrogen-Nitrogen Data

Sample	Depth	mg C/g sediment	mg N/g sediment
01-4-A	33	18.04	2.17
01-4-B-1	39	17.50	2.17
01-4-B-2	4.5	17.70	2.15
01-4-C	45	15.54	1.87
01-4-D	51	16.73	1.96
01-5-A	1.5	23.46	2.69
01-5-B	4.5	25.73	2.85
01-5-C	7.5	24.99	2.87
01-5-D	10.5	24.75	2.82
01-5-E-1	13.5	24.46	2.87
01-5-E-2	15	24.62	2.82
01-5-F		23.83	2.72
01-5-G		26.70	2.68
01-5-H		26.97	1.87
01-5-I		26.64	2.70
01-5-J		24.55	2.52
01-5-K-1		25.22	2.47
01-5-K-2		25.75	2.55
02-5-A	1.5	24.49	2.83
02-5-B	4.5	24.20	2.71
02-5-C	7.5	23.67	2.75
02-5-D	10.5	23.61	2.69
02-5-E	13.5	25.62	2.75
02-5-F		26.01	2.63
02-5-G		25.62	2.68
02-5-H		26.14	2.56
02-5-I		26.35	2.64
02-5-J		29.02	2.68
03-1-A	33	17.69	2.13
03-1-B	39	17.33	2.06
03-1-C	45	14.90	1.77
03-1-D	51	17.71	2.17
03-2-A	1.5	23.70	2.63
03-2-B	4.5	25.25	2.96
03-2-C-1	7.5	24.38	2.64
03-2-C-2	7.5	24.68	2.76
03-2-D	10.5	22.95	2.45
03-2-E	13.5	37.16	2.86
03-2-F		28.32	2.69
03-2-G		28.64	1.81
03-2-H		28.29	1.78
03-2-I		28.08	2.62
03-2-J-1		25.82	2.51
03-2-J-2		26.07	2.55
04-1-A	1.5	24.25	2.64
04-1-B	4.5	24.21	2.64

Sample	Depth	mg C/g sediment	mg N/g sediment
04-1-C	7.5	27.47	2.69
04-1-D	10.5	24.98	2.72
04-1-E	13.5	25.86	2.78
04-1-F		28.01	2.72
04-1-H		31.59	2.55
04-1-J		36.74	1.97
05-1-A	33	17.79	2.15
05-1-B	39	17.56	2.59
05-1-D	51	21.45	2.03
05-2-A	1.5	24.09	2.63
05-2-B-1	4.5	21.09	2.30
05-2-B-2	4.5	22.88	2.48
05-2-C	7.5	25.01	2.72
05-2-D	10.5	24.35	2.63
05-2-E	13.5	24.52	2.66
05-2-F		26.26	2.61
05-2-G		24.84	2.25
05-2-H		24.15	2.24
05-2-I		24.04	2.23
05-2-J		41.10	2.07
06-1-A	3	17.10	2.05
06-1-B	15	23.38	2.61
06-1-C	22	19.74	2.32
06-1-D	31	19.64	2.26
06-1-E	37	18.89	2.32
06-1-F		17.25	2.07
06-1-G		17.31	2.12
06-1-H		16.88	1.96
06-1-I-1		17.95	2.18
06-1-I-2		17.62	2.14
07-1-A	3.5	11.21	1.29
07-1-B	6.5	10.68	1.30
07-1-C-1	9.5	16.36	1.89
07-1-C-2	25.5	15.02	1.79
07-1-D	12.5	17.22	2.01
07-1-DM	0	1.60	0.15
07-1-E	17	17.14	2.04
07-1-F		17.53	1.97
07-1-G		16.94	1.95
07-1-H		17.64	2.10
08-1-A	2.5	17.45	2.02
08-1-B	7.5	17.22	2.01
08-1-C-1	8.5	16.23	1.88
08-1-C-2	45.5	17.49	1.99
08-1-D	11.5	17.73	2.02
08-1-DM	0	1.73	0.16

Sample	Depth	mg C/g sediment	mg N/g sediment
08-1-DM1	0	1.54	0.21
08-1-DM2	0	2.82	0.29
08-1-E	16	17.02	1.95
08-1-F		15.26	1.74
09-1-A	1.5	14.60	1.60
09-1-B	4.5	22.03	2.43
09-1-C	7.5	22.28	2.44
09-1-DM	0	2.13	0.20
09-1-DM	0	20.91	2.36
09-1-E	15	18.48	2.20
09-1-F		18.00	2.13
09-1-G		17.88	2.17
09-1-H-1		15.64	1.88
09-1-H-2		17.06	2.00
10-1-A	1.5	25.26	2.25
10-1-B	4.5	22.44	2.60
10-1-C	7.5	19.58	2.42
10-1-D	10.5	20.33	2.45
10-1-DM-1	0	2.95	0.35
10-1-DM-2	0	2.96	0.30
10-1-E	15	18.72	2.32
10-1-F		17.66	2.29
10-1-G		17.97	2.22
10-1-H		18.16	2.19
11-1-A	1.5	11.83	1.27
11-1-B	4.5	22.22	2.60
11-1-C	7.5	19.32	2.29
11-1-D	10.5	19.69	2.37
11-1-E	15	19.53	2.39
11-1-F		19.51	2.41
12-1-A	1.5	21.48	2.48
12-1-B	4.5	19.13	2.24
12-1-C-1	7.5	19.16	2.14
12-1-C-2	7.5	19.36	2.20
12-1-D	10.5	20.12	2.27
12-1-E	15	18.76	2.20
12-1-F		16.79	2.07
13-1-A	1.5	24.13	2.69
13-1-B	4.5	22.94	2.56
13-1-C	7.5	17.57	2.07
13-1-D	10.5	19.72	2.43
13-1-E	15	20.07	2.16
13-1-F		19.01	2.04
14-1-A-1	1.5	23.05	2.48
14-1-A-2	1.5	24.85	1.75
14-1-B	4.5	18.81	2.22

Sample	Depth	mg C/g sediment	mg N/g sediment
14-1-C	7.5	19.37	2.25
14-1-D	10.5	17.45	2.06
14-1-E	15	18.90	2.16
14-1-F		17.28	2.08
15-1-A	1.5	17.56	1.93
15-1-B	4.5	16.62	1.88
15-1-C	7.5	17.06	1.86
15-1-D	10.5	29.37	1.76
15-1-E	15	16.75	1.73
15-1-F		15.87	1.62
16-1-A	1.5	17.03	1.75
16-1-B	4.5	17.31	1.76
16-1-C	7.5	16.60	1.74
16-1-D	10.5	17.27	1.70
16-1-E	15	17.03	1.69
16-1-F		16.78	1.63
16-2-A	1.5	21.02	2.25
16-2-B	6	19.34	2.41
16-2-C	12	21.48	2.58
16-2-D-1	10.5	14.03	1.71
16-2-D-2	10.5	15.76	1.86
16-2-E	15	18.64	2.26
16-2-F		22.32	2.69
16-2-G		14.11	1.69
16-2-H		18.63	2.23
16-2-I		19.34	2.25
17-1-A	1.5	24.75	2.31
17-1-B	4.5	30.20	2.79
17-1-C	29.5	28.14	2.60
17-1-D-1	10.5	19.75	1.94
17-1-D-2	10.5	24.82	2.25
17-1-E	15	23.04	2.52
17-1-F		20.15	2.44
17-1-G		18.71	2.19
17-1-H		19.00	2.24
17-1-I		18.39	2.33
17-1-J		18.56	2.30
18-1-A	3	31.63	2.22
18-1-B	9	24.15	2.32
18-1-C	15	22.76	2.42
18-1-D	10.5	21.55	2.42
18-1-DM	0	6.14	0.55
18-1-E	15	19.09	2.26
18-1-F		20.03	2.30
18-1-G-1		18.70	2.25
18-1-G-2		18.14	2.17

Sample	Depth	mg C/g sediment	mg N/g sediment
19-1-A	1.5	14.28	1.49
19-1-B-1	4.5	15.52	1.61
19-1-B-2	4.5	15.24	1.59
19-1-C	7.5	17.33	1.81
19-1-D	10.5	15.77	1.92
19-1-E	15	18.39	2.23
19-1-F		18.61	2.30
20-1-A	1.5	18.97	2.13
20-1-B-1	4.5	16.00	1.89
20-1-B-2	4.5	15.99	1.88
20-1-C	7.5	15.52	1.85
20-1-D	10.5	15.38	1.82
20-1-E	15	16.98	1.83
20-1-F		14.75	1.70
21-1-A	1.5	21.67	1.64
21-1-B	4.5	18.52	1.68
21-1-C	7.5	0.21	-0.55
21-1-C	7.5	-0.04	-0.01
21-1-D	10.5	16.00	1.29
21-1-E	15	17.49	1.26
21-1-F		15.89	1.31
22-1-A	1.5	21.07	1.62
22-1-B	4.5	17.83	1.67
22-1-C	7.5	17.20	1.51
22-1-D	10.5	17.80	1.57
22-1-E	15	17.26	1.43
22-1-F		16.42	1.26
23-1-A-1	1.5	23.25	1.97
23-1-A-2	1.5	22.30	1.92
23-1-B	4.5	18.61	1.58
23-1-C	7.5	18.64	1.64
23-1-D	10.5	18.63	1.62
23-1-E	15	17.76	1.52
23-1-F		17.85	1.34
24-1-A-1	1.5	19.42	2.41
24-1-A-2	1.5	23.50	2.87
24-1-B	4.5	18.46	2.21
24-1-C	7.5	17.35	2.09
24-1-D	10.5	20.23	2.41
24-1-DM	0	2.45	0.38
24-1-E	15	17.50	2.06
24-1-F		12.96	1.49
25-1-A	1.5	23.06	2.44
25-1-B	4.5	19.97	2.30
25-1-C-1	7.5	18.07	2.08
25-1-C-2	7.5	18.13	2.13

Sample	Depth	mg C/g sediment	mg N/g sediment
25-1-D	10.5	17.50	2.04
25-1-E	15	17.91	2.07
25-1-F		17.29	2.01
25-1-T1	0	19.83	2.15
25-1-T2	0	19.87	2.17
26-1-A	1.5	24.08	2.57
26-1-B	4.5	19.42	2.27
26-1-C	7.5	19.22	2.26
26-1-D	10.5	19.20	2.32
26-1-E	15	19.36	2.27
26-1-F-1		19.99	2.33
26-1-F-2		20.15	2.29
27-1-A	1.5	25.12	2.84
27-1-B	4.5	16.04	1.87
27-1-C	7.5	19.65	2.30
27-1-D	10.5	19.86	2.34
27-1-E	15	20.16	2.33
27-1-F		19.72	2.35
28-1-A	1.5	20.08	2.23
28-1-B	4.5	0.09	0.01
28-1-C	7.5	45.44	4.46
28-1-D	10.5	18.08	2.12
28-1-E	15	18.26	2.14
28-1-F-1		17.70	2.14
28-1-F-2		17.62	2.11
29-1-A	1.5	23.96	2.73
29-1-B	4.5	24.69	2.52
29-1-C	7.5	24.55	2.60
29-1-D	10.5	20.74	2.29
29-1-E	15	21.39	2.41
29-1-F		19.13	2.23
30-1-A	1.5	21.23	2.34
30-1-B	4.5	18.85	2.10
30-1-C-1	7.5	19.12	2.11
30-1-C-2	7.5	17.39	2.09
30-1-D	10.5	18.18	2.17
30-1-E	15	17.15	2.05
30-1-F		17.26	2.01
31-1-G		15.43	1.85
31-1-H		24.79	2.96
32-1-D	10.5	16.70	1.98
32-1-E	15	16.07	1.92
32-1-F	21	18.63	2.19
34-1-A	1.5	20.02	2.33
34-1-B	4.5	19.64	2.28
34-1-C	9	19.93	2.38

Sample	Depth	mg C/g sediment	mg N/g sediment
34-1-D-1	10.5	21.16	2.43
34-1-D-2	10.5	21.17	2.42
34-1-E	15	18.23	2.16
34-1-F		17.21	2.04
34-1-G		17.64	2.14
34-1-H		18.42	2.03
34-1-I		17.08	2.05
34-1-J		15.96	1.86
34-1-K		20.36	3.39
34-1-L		15.98	2.01
34-1-M-1		16.65	1.99
34-1-M-2		17.04	2.11
35-1-A	1.5	24.80	2.26
35-1-B	4.5	18.60	1.52
35-1-C	7.5	21.02	1.93
35-1-D	10.5	21.85	2.12
35-1-E	15	20.00	1.97
35-1-F		19.94	1.92
36-1-A-1	1.5	17.69	1.59
36-1-A-2	1.5	18.44	1.60
36-1-B	4.5	18.16	1.63
36-1-C	7.5	18.09	1.59
36-1-D	10.5	18.69	1.77
36-1-E	15	19.33	1.62
36-1-F		18.73	1.49
37-1-A	1.5	0.30	-0.60
37-1-B	4.5	42.25	4.27
37-1-C	7.5	21.58	2.11
37-1-D	10.5	20.25	1.97
37-1-E-1	15	18.75	1.87
37-1-E-2	15	19.42	1.81
37-1-F		20.03	1.91

Appendix K

Atterberg Data

Sample ID	Interval (cm)	Sample Date	Liquid Limit (w_L)	Plastic Limit (w_P)	Plasticity Index (I_P)
01-6	6-12	7/14/2009	100	43	57
01-6	12-18	7/14/2009	109	46	63
01-6	18-24	7/14/2009	101	40	61
01-6	24-30	7/14/2009	104	36	69
01-6 QC	24-30	7/14/2009	102	38	64
02-6	0-6	7/14/2009	105	37	68
02-6	6-12	7/14/2009	106	42	64
02-6	12-18	7/14/2009	102	40	63
02-6	18-24	7/14/2009	100	36	64
02-6	24-30	7/14/2009	101	38	63
03-1	24-36	7/13/2009	100	35	65
03-1	36-48	7/13/2009	99	35	64
03-1	48-60	7/13/2009	94	34	60
03-3	0-6	7/14/2009	106	38	68
03-3	6-12	7/14/2009	105	45	61
03-3	12-18	7/14/2009	105	43	62
03-3	18-24	7/14/2009	102	37	64
03-3	24-30	7/14/2009	93	35	58
04-2	0-6	7/14/2009	102	34	67
04-2	6-12	7/14/2009	103	40	63
04-2	12-18	7/14/2009	101	43	58
04-2	18-24	7/14/2009	105	38	67
04-2	24-28	7/14/2009	103	39	64
05-1	24-36	7/13/2009	99	32	66
05-1	36-48	7/13/2009	97	34	63
05-1	48-60	7/13/2009	93	33	60
05-3	0-6	7/14/2009	105	36	69
05-3	6-12	7/14/2009	98	40	58
05-3	12-18	7/14/2009	101	43	58
05-3	18-24	7/14/2009	97	36	61
05-3	24-30	7/14/2009	88	35	53
06-1	20-32	7/14/2009	87	34	53
06-1	32-44	7/14/2009	101	34	67
06-1	44-56	7/14/2009	99	32	67
7-1	16-28	7/14/2009	83	28	54
07-1	28-40	7/14/2009	90	32	58
07-1	40-52	7/14/2009	88	35	53
07-1 QC	40-52	7/14/2009	88	35	53
08-1	35-47	7/14/2009	91	33	58
08-1 QC	35-47	7/14/2009	92	36	56
08-1	47-59	7/14/2009	94	36	58
08-1	59-71	7/14/2009	94	34	61
08-2	0-12	7/16/2009	90	35	55
08-2	12-24	7/16/2009	95	32	63

Sample ID	Interval (cm)	Sample Date	Liquid Limit (w_L)	Plastic Limit (w_P)	Plasticity Index (I_P)
08-2	24-36	7/16/2009	92	34	59
09-1	10-22	7/15/2009	100	32	68
09-1	22-34	7/15/2009	92	32	60
09-1	34-46	7/15/2009	90	31	58
09-1 QC	34-46	7/15/2009	92	31	60
10-1	8-20	7/15/2009	101	36	65
10-1	20-32	7/15/2009	96	34	62
10-1	32-44	7/15/2009	98	37	61
11-1	0.5-12.5	7/15/2009	98	38	60
11-1	12.5-24.5	7/15/2009	104	37	68
11-1	24.5-36.5	7/15/2009	105	35	70
12-1	0-12	7/14/2009	91	34	57
12-1	12-24	7/14/2009	97	37	60
12-1	24-36	7/14/2009	93	31	61
13-1	0-12	7/14/2009	102	35	67
13-1	12-24	7/14/2009	96	35	61
13-1	24-36	7/14/2009	99	30	69
1-4	24-36	7/13/2009	92	33	59
1-4	36-48	7/13/2009	98	34	64
1-4	48-60	7/13/2009	89	27	62
14-1	0.1-12.1	7/14/2009	102	37	64
14-1	12.1-24.1	7/14/2009	95	36	59
14-1	24.1-36.1	7/14/2009	98	33	65
15-1	8-20	7/15/2009	94	35	59
15-1	20-32	7/15/2009	89	33	56
15-1 QC	20-32	7/15/2009	86	35	51
15-1	32-44	7/15/2009	97	35	63
16-1	0-12	7/15/2009	91	36	54
16-1	12-24	7/15/2009	94	32	62
16-1	24-36	7/15/2009	99	34	65
16-2	0-12	7/15/2009	97	39	58
16-2	12-24	7/15/2009	92	36	56
16-2	24-36	7/15/2009	96	36	59
17-1	21-33	7/13/2009	83	34	49
17-1	33-45	7/13/2009	86	35	52
17-1 QC	33-45	7/13/2009	85	35	49
17-1	45-57	7/13/2009	86	33	53
17-1 QC	45-57	7/13/2009	85	33	52
18-1	5-17	7/13/2009	86	35	51
18-1	17-29	7/13/2009	106	36	70
18-1	29-41	7/13/2009	100	36	65
19-1	11-23	7/14/2009	91	34	57
19-1	23-35	7/14/2009	98	34	64
19-1	35-47	7/14/2009	100	36	64

Sample ID	Interval (cm)	Sample Date	Liquid Limit (w_L)	Plastic Limit (w_P)	Plasticity Index (I_P)
20-1	0.8-12.8	7/15/2009	81	33	48
20-1	12.8-24.8	7/15/2009	93	32	62
20-1	24.8-36.8	7/15/2009	91	33	58
21-1	3-15	7/15/2009	88	34	55
21-1	15-27	7/15/2009	85	31	55
21-1	27-39	7/15/2009	86	31	54
22-1	3.5-15.5	7/15/2009	94	35	59
22-1	15.5-27.5	7/15/2009	93	35	57
22-1	27.5-39.5	7/15/2009	88	32	56
23-1	10-22	7/15/2009	92	29	63
23-1	22-34	7/15/2009	94	34	60
23-1	34-46	7/15/2009	86	31	55
24-1	13-25	7/15/2009	94	35	59
24-1	25-37	7/15/2009	92	33	59
24-1	37-49	7/15/2009	90	33	57
25-1	12-24	7/15/2009	94	34	60
25-1	24-36	7/15/2009	92	32	60
25-1	36-48	7/15/2009	87	34	53
26-1	2-14	7/15/2009	89	29	59
26-1	14-26	7/15/2009	97	33	64
26-1	26-38	7/15/2009	98	31	67
27-1	7-19	7/15/2009	96	34	62
27-1	19-31	7/15/2009	96	31	66
27-1	31-43	7/15/2009	95	29	66
28-1	0-12	7/15/2009	96	32	64
28-1	12-24	7/15/2009	96	35	61
28-1 QC	12-24QC	7/15/2009	92	33	59
28-1	24-36	7/15/2009	94	34	61
29-1	0.1-12.1	7/15/2009	94	38	56
29-1	12.1-24.1	7/15/2009	92	33	59
29-1	24.1-36.1	7/15/2009	93	35	58
30-1	0-12	7/16/2009	97	32	66
30-1	12-24	7/16/2009	95	28	66
30-1	24-36	7/16/2009	95	30	65
31-1	15-27	7/16/2009	92	32	60
31-1	27-39	7/16/2009	96	31	65
31-1	39-45	7/16/2009	100	34	66
32-1	0-12	7/16/2009	91	35	56
32-1	12-24	7/16/2009	94	30	65
32-1	24-36	7/16/2009	90	36	55
32-1 QC	24-36QC	7/16/2009	88	34	54
33-1	0-12	7/16/2009	93	35	58
33-1	12-24	7/16/2009	95	34	61
33-1	24-36	7/16/2009	88	33	55

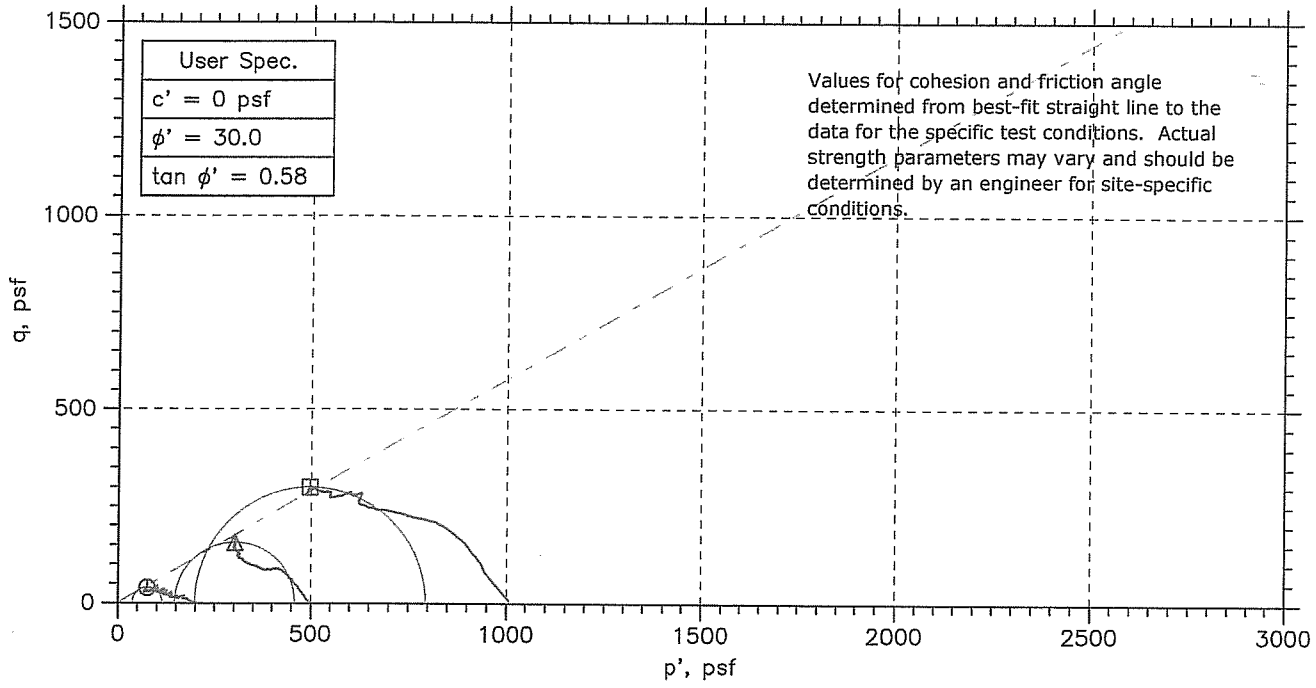
Sample ID	Interval (cm)	Sample Date	Liquid Limit (w_L)	Plastic Limit (w_P)	Plasticity Index (I_P)
34-1	7-19	7/16/2009	94	31	63
34-1	19-31	7/16/2009	86	30	56
34-1 QC	19-31QC	7/16/2009	87	35	53
34-1	31-43	7/16/2009	92	29	63
35-1	0.1-12.1	7/16/2009	87	35	52
35-1	12.1-24.1	7/16/2009	103	34	69
35-1	24.1-36.1	7/16/2009	94	32	63
36-1	18-30	7/15/2009	104	32	72
36-1	30-42	7/15/2009	102	35	67
36-1	42-54	7/15/2009	99	34	65
37-1	0.3-12.3	7/15/2009	103	35	68
37-1	12.3-24.3	7/15/2009	103	34	68
37-1	24.3-36.3	7/15/2009	100	33	67

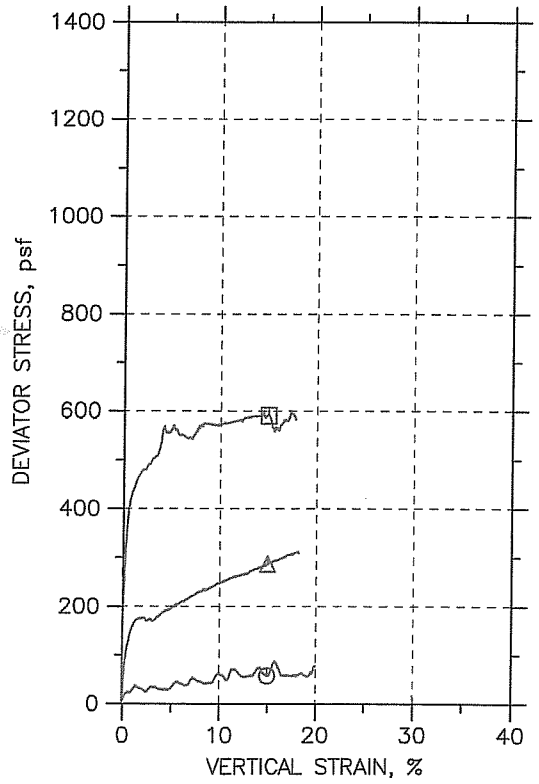
QC- Duplicate lab sample for quality control

Appendix L

Consolidation Data

CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





Symbol		⏲	△	⊡	
Sample No.		2-04	3-05	5-05	
Test No.		CU-1	CU-2	CU-3	
Depth		---	---	---	
Initial	Diameter, in	2.35	2.35	2.35	
	Height, in	4.72	4.72	4.72	
	Water Content, %	103.3	108.1	100.6	
	Dry Density, pcf	44.48	43.01	45.37	
	Saturation, %	100.0	100.0	100.0	
	Void Ratio	2.79	2.92	2.72	
Before Shear	Water Content, %	110.1	90.0	68.1	
	Dry Density, pcf	42.44	49.13	59.37	
	Saturation*, %	100.0	100.0	100.0	
	Void Ratio	2.97	2.43	1.84	
	Back Press., psf	4464	4248	4176	
Ver. Eff. Cons. Stress, psf		199.7	499.4	999.3	
Shear Strength, psf		28.66	143.1	295.4	
Strain at Failure, %		15	15	15	
Strain Rate, %/min		0.016	0.016	0.016	
B-Value		0.96	1.	1.	
Estimated Specific Gravity		2.7	2.7	2.7	
Liquid Limit		---	---	---	
Plastic Limit		---	---	---	

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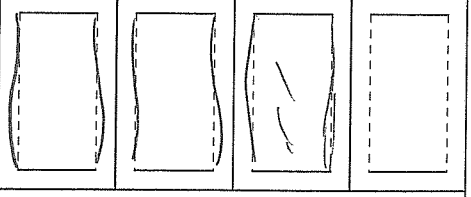
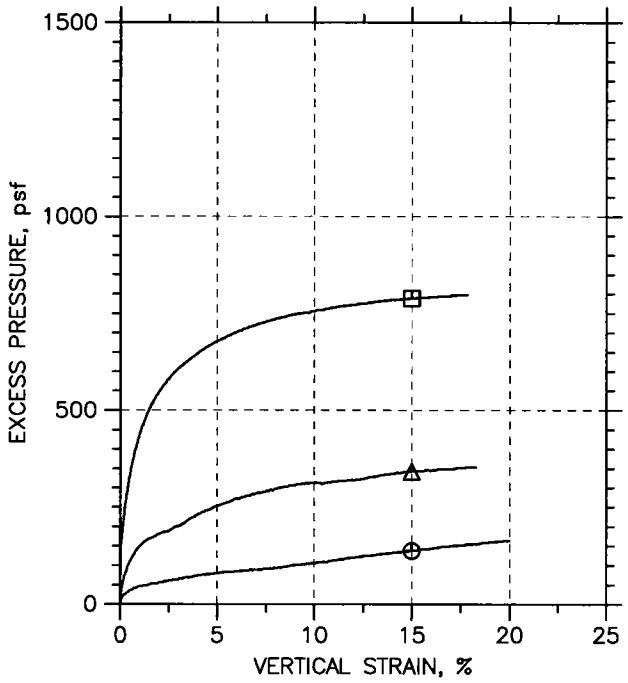
Project: MBDS
Location: Boston, MA
Project No.: GTX-9197
Boring No.: ---
Sample Type: tube
Description: Wet, dark gray silt
Remarks: System 0

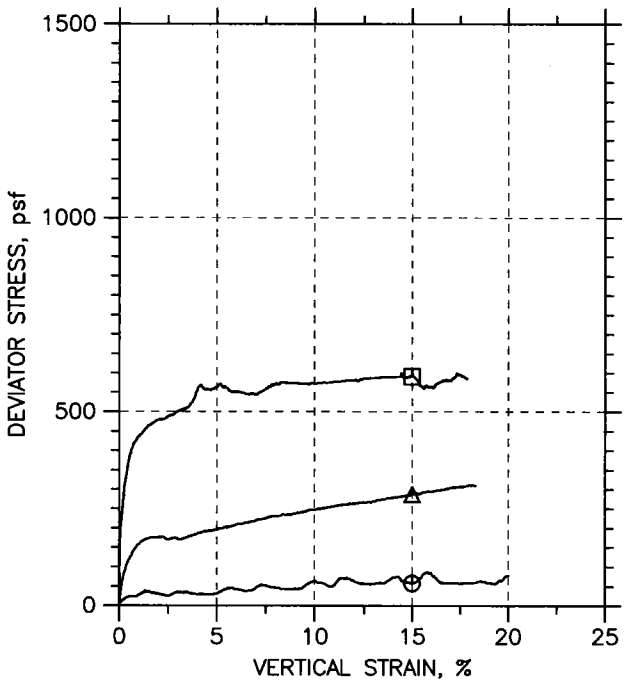


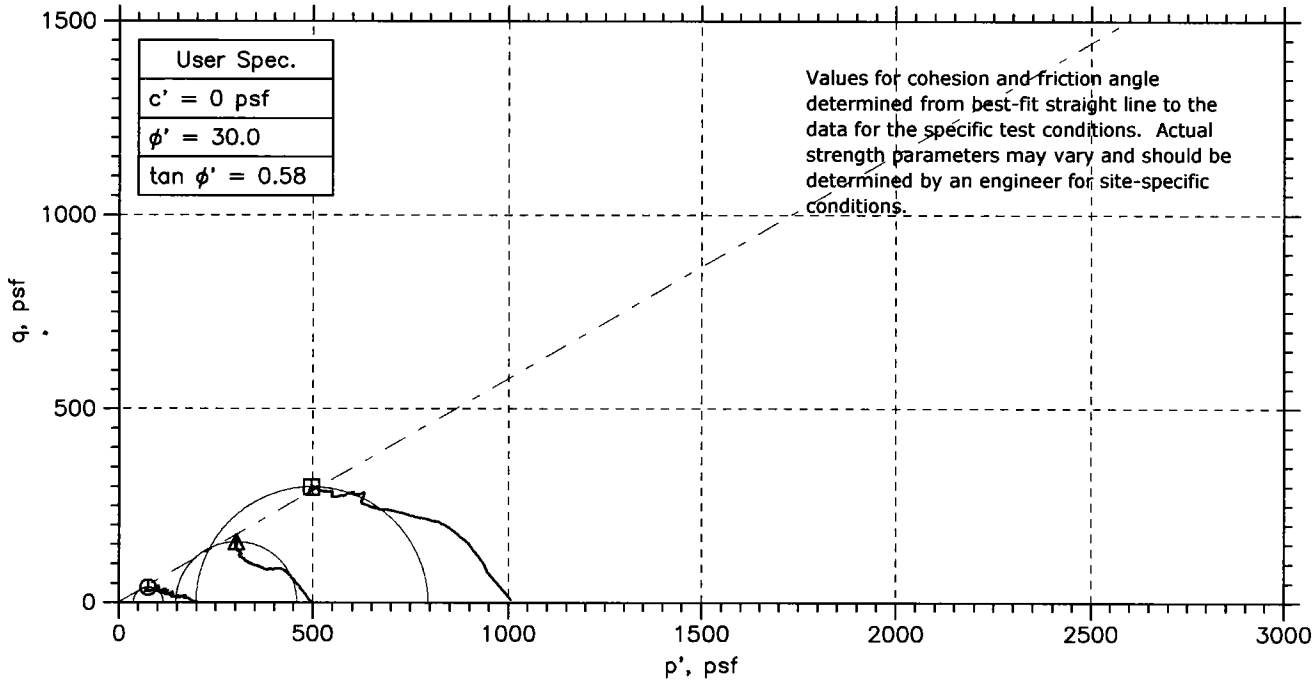
Phase calculations based on start and end of test.
* Saturation is set to 100% for phase calculations.

Thu, 03-SEP-2009 10:26:36

CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767







	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
○	2-04	CU-1	---	md	08/07/09	jdt		9197-CU-1n.dat
△	3-05	CU-2	---	md	08/05/09	jdt		9197-CU-2n.dat
□	5-05	CU-3	---	md	08/05/09	jdt		9197-CU-3n.dat

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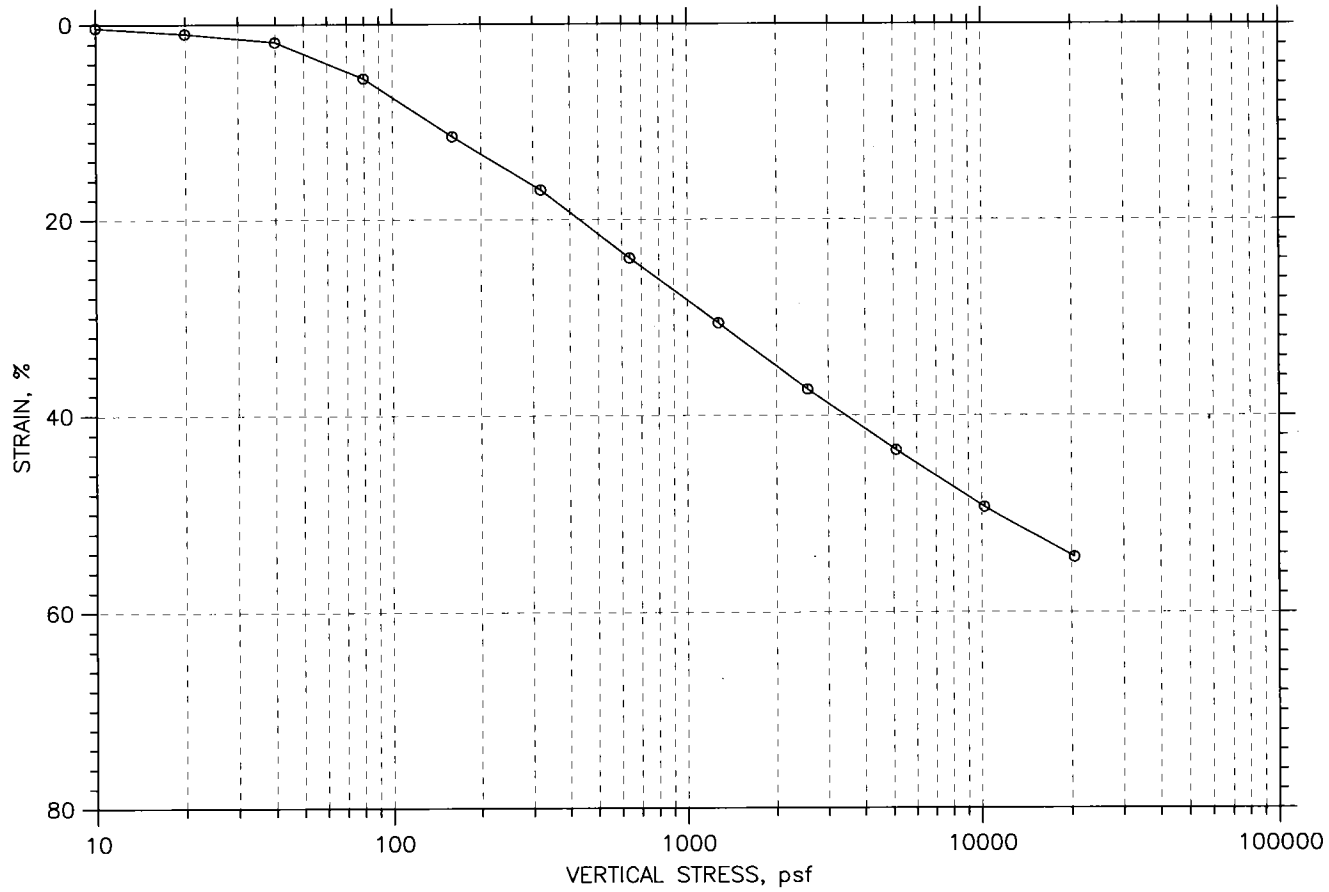
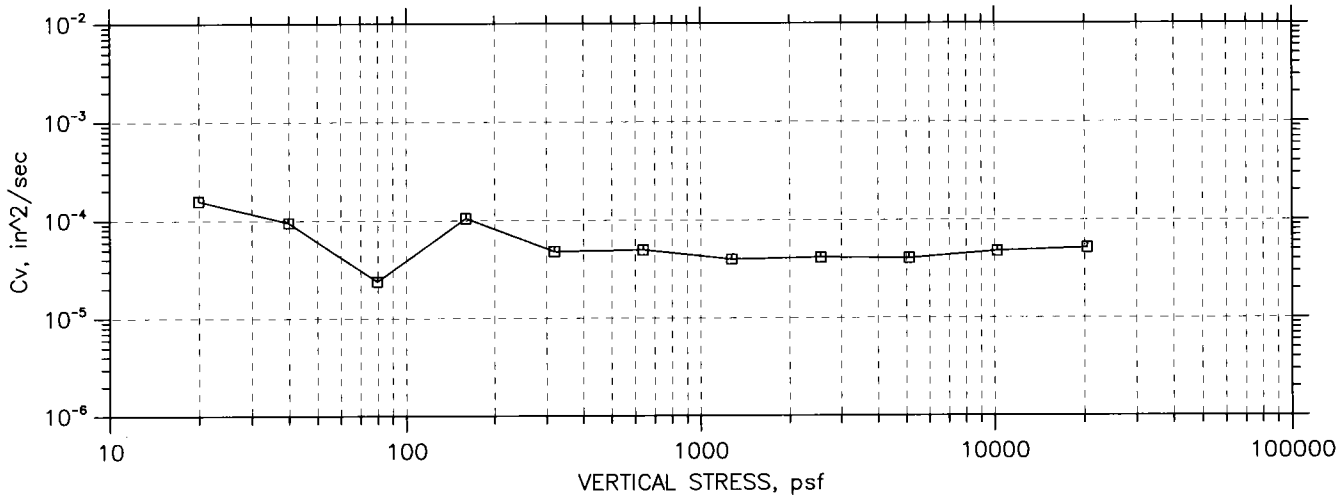
Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
Boring No.: ---	Sample Type: tube	
Description: Wet, dark gray silt		
Remarks: System 0		

Thu, 03-SEP-2009 10:26:45

CONSOLIDATION TEST DATA

SUMMARY REPORT

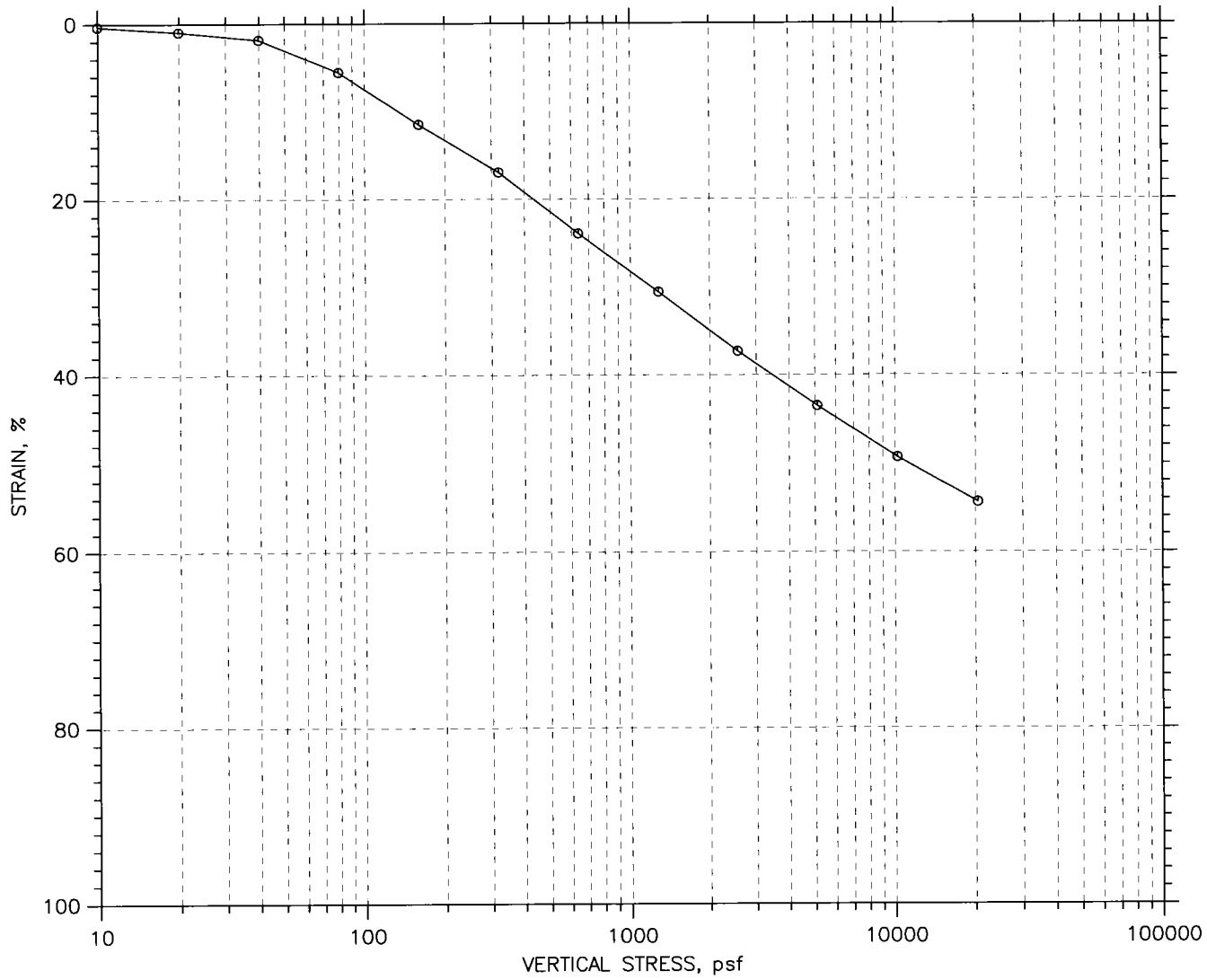




GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

CONSOLIDATION TEST DATA

SUMMARY REPORT



				Before Test	After Test
Overburden Pressure: ---				Water Content, %	128.41	42.54
Preconsolidation Pressure: ---				Dry Unit Weight, pcf	37.13	81.68
Compression Index: ---				Saturation, %	95.67	100.00
Diameter: 1.91 in		Height: 1.1 in		Void Ratio	3.96	1.26
LL: ---	PL: ---	PI: ---	GS: 2.95			

GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 3-04
Test No.: C-5

Location: Boston, MA
Tested By: md
Test Date: 08/18/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System E

Estimated Specific Gravity: 2.95
Initial Void Ratio: 3.96
Final Void Ratio: 1.26

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.10 in
Specimen Diameter: 1.91 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	4428	RING		4081
Wt. Container + Wet Soil, gm	222	390.05	363.67	54.78
Wt. Container + Dry Soil, gm	102.22	350.6	350.6	41.03
Wt. Container, gm	8.11	319.88	319.88	8.71
Wt. Dry Soil, gm	94.11	30.72	30.72	32.32
Water Content, %	127.28	128.41	42.54	42.54
Void Ratio	---	3.96	1.26	---
Degree of Saturation, %	---	95.67	100.00	---
Dry Unit Weight, pcf	---	37.133	81.679	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 3-04
Test No.: C-5

Location: Boston, MA
Tested By: md
Test Date: 08/18/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System E

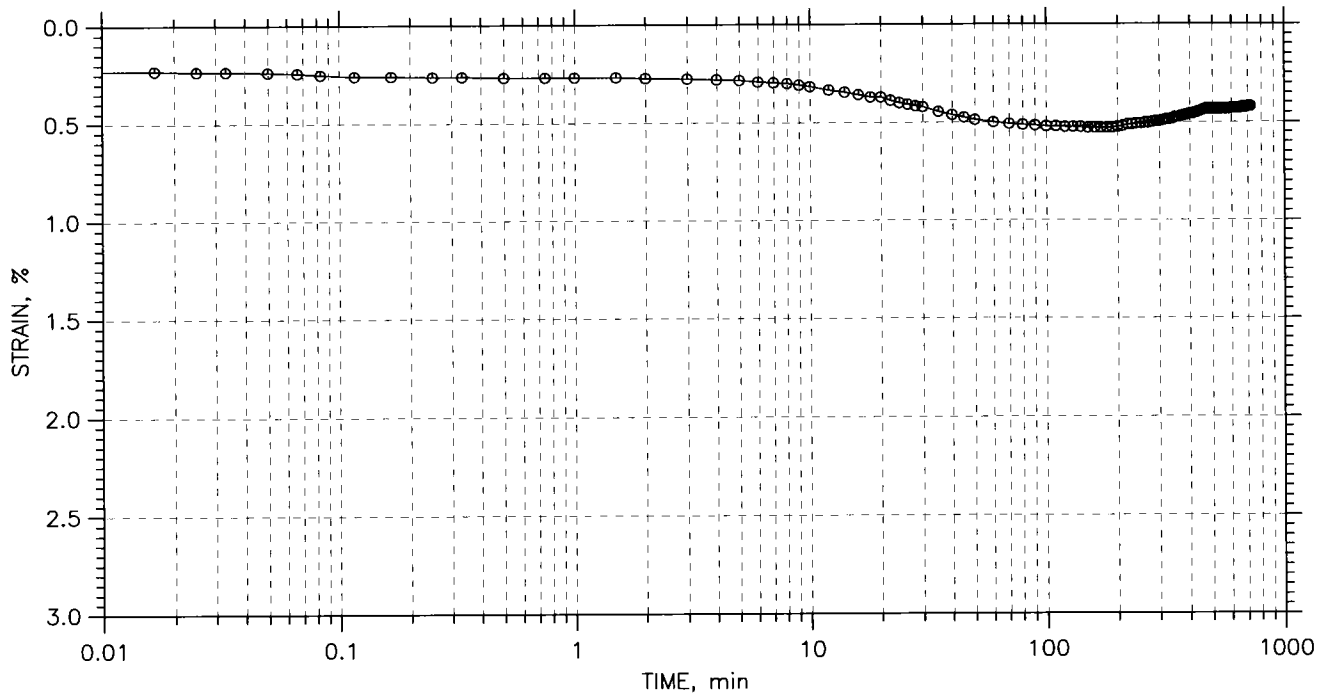
	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	10	0.004659	3.940	0.42	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
2	20	0.01128	3.910	1.03	6.4	0.0	1.54e-004	0.00e+000	1.54e-004
3	40	0.02091	3.867	1.90	10.4	0.0	9.26e-005	0.00e+000	9.26e-005
4	80	0.06166	3.683	5.61	39.3	0.0	2.34e-005	0.00e+000	2.34e-005
5	160	0.1267	3.390	11.51	9.8	6.4	8.45e-005	1.30e-004	1.02e-004
6	320	0.1867	3.119	16.98	16.3	14.7	4.49e-005	4.97e-005	4.71e-005
7	640	0.2635	2.773	23.96	14.9	10.9	4.23e-005	5.76e-005	4.88e-005
8	1.28e+003	0.3365	2.443	30.59	16.7	10.3	3.16e-005	5.10e-005	3.90e-005
9	2.56e+003	0.4111	2.107	37.37	12.9	8.4	3.35e-005	5.18e-005	4.07e-005
10	5.12e+003	0.4796	1.798	43.60	10.6	7.0	3.32e-005	5.05e-005	4.01e-005
11	1.02e+004	0.5439	1.508	49.44	6.8	5.3	4.20e-005	5.34e-005	4.70e-005
12	2.05e+004	0.5999	1.255	54.54	4.8	4.2	4.76e-005	5.46e-005	5.08e-005

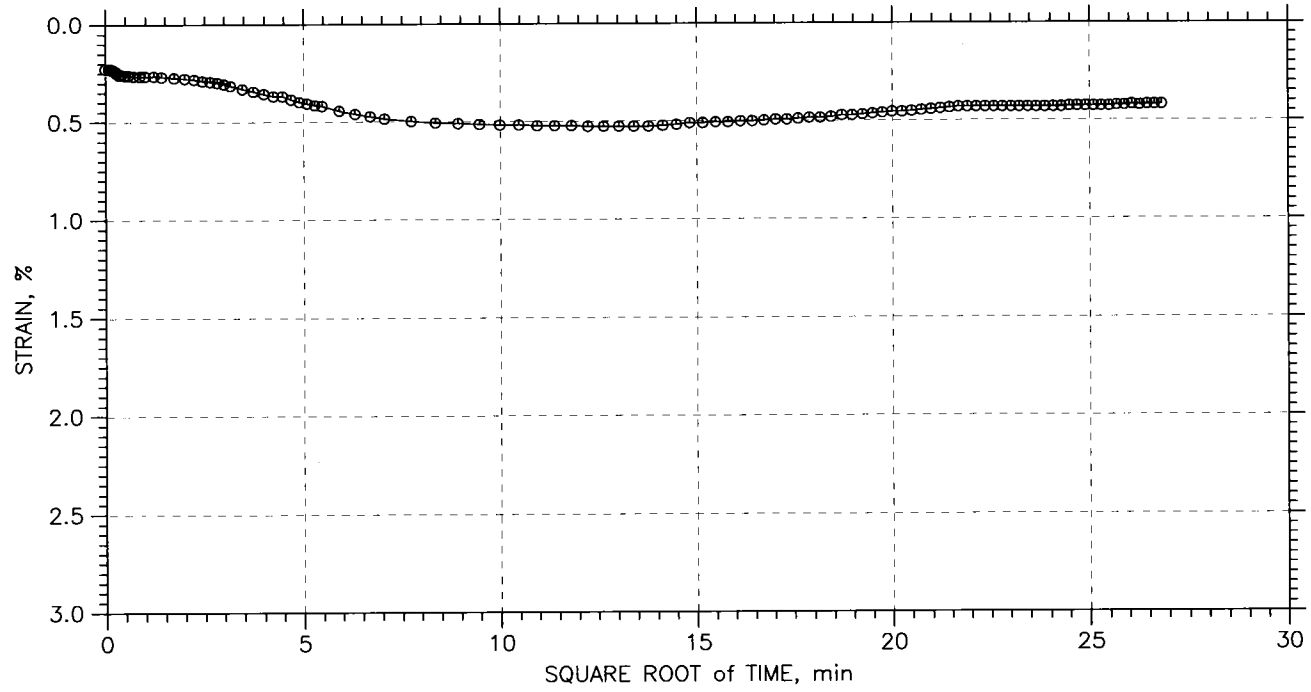
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 10. psf





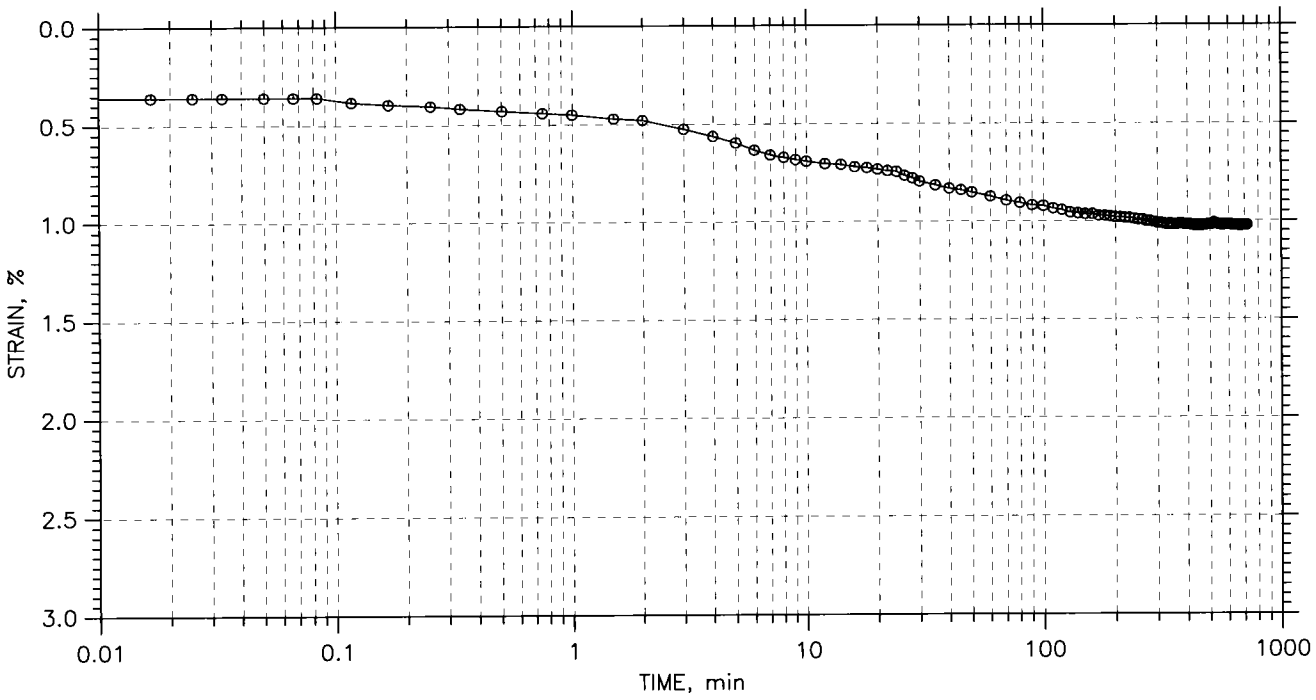
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

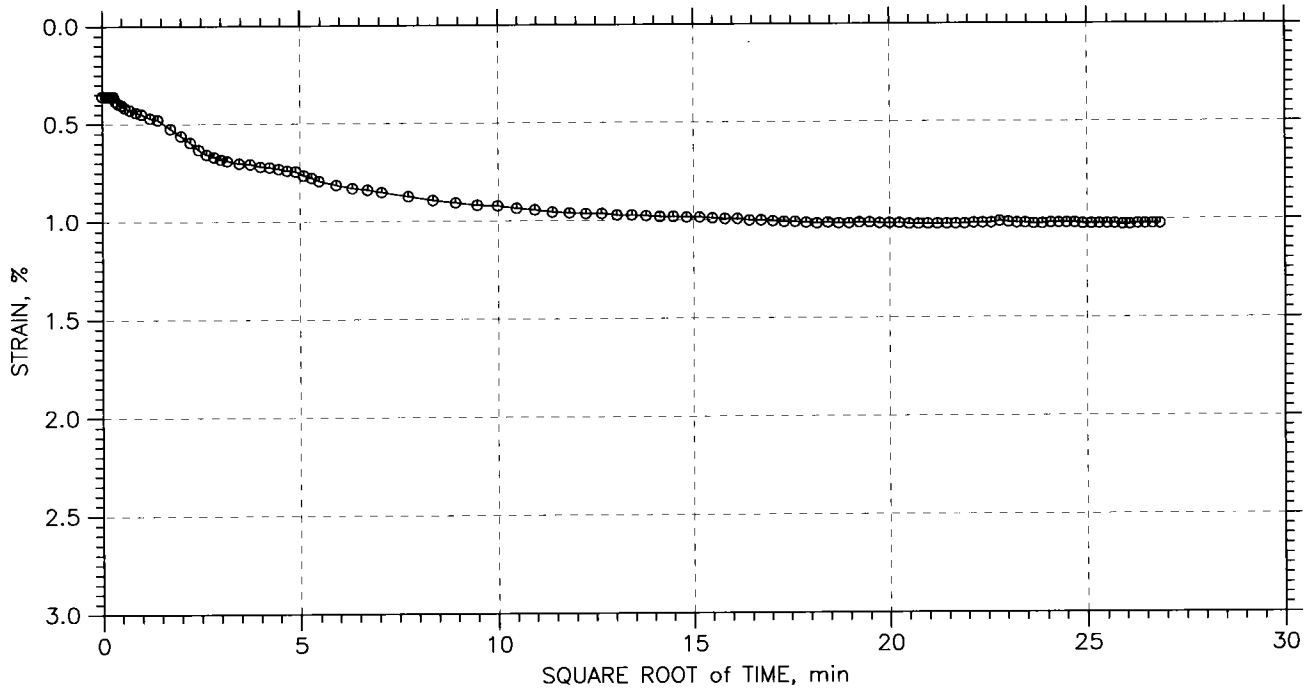
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 20. psf





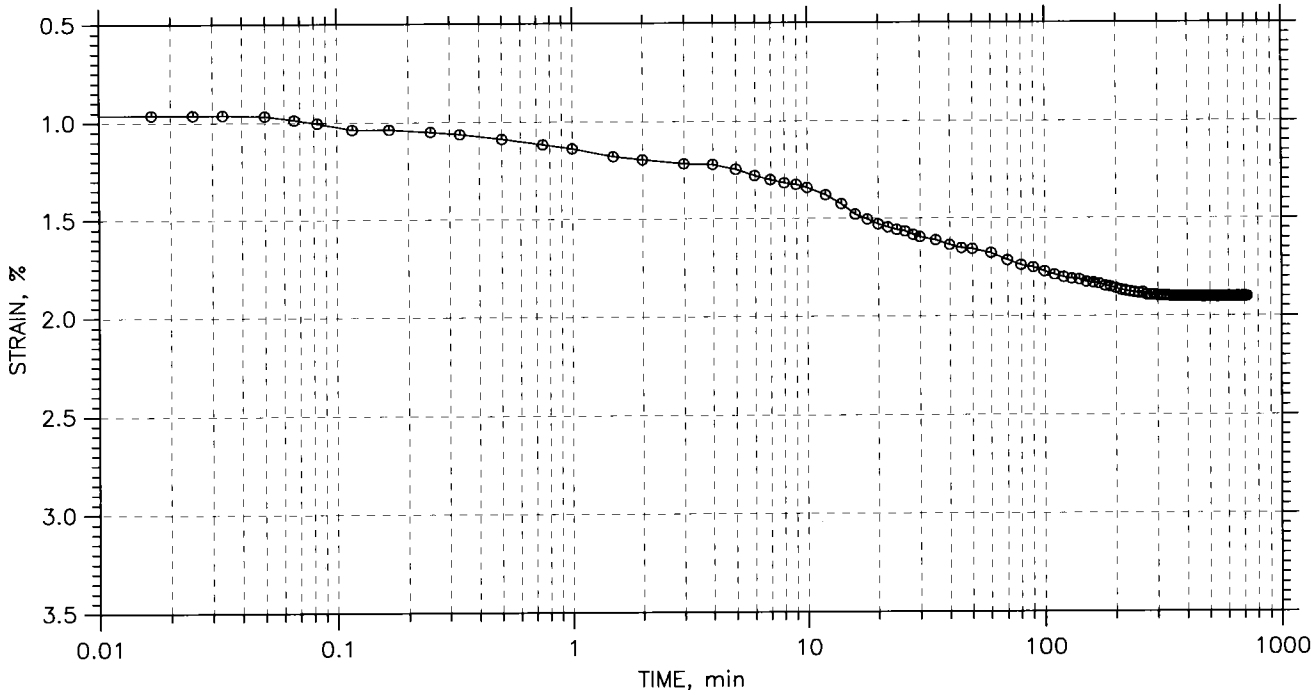
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

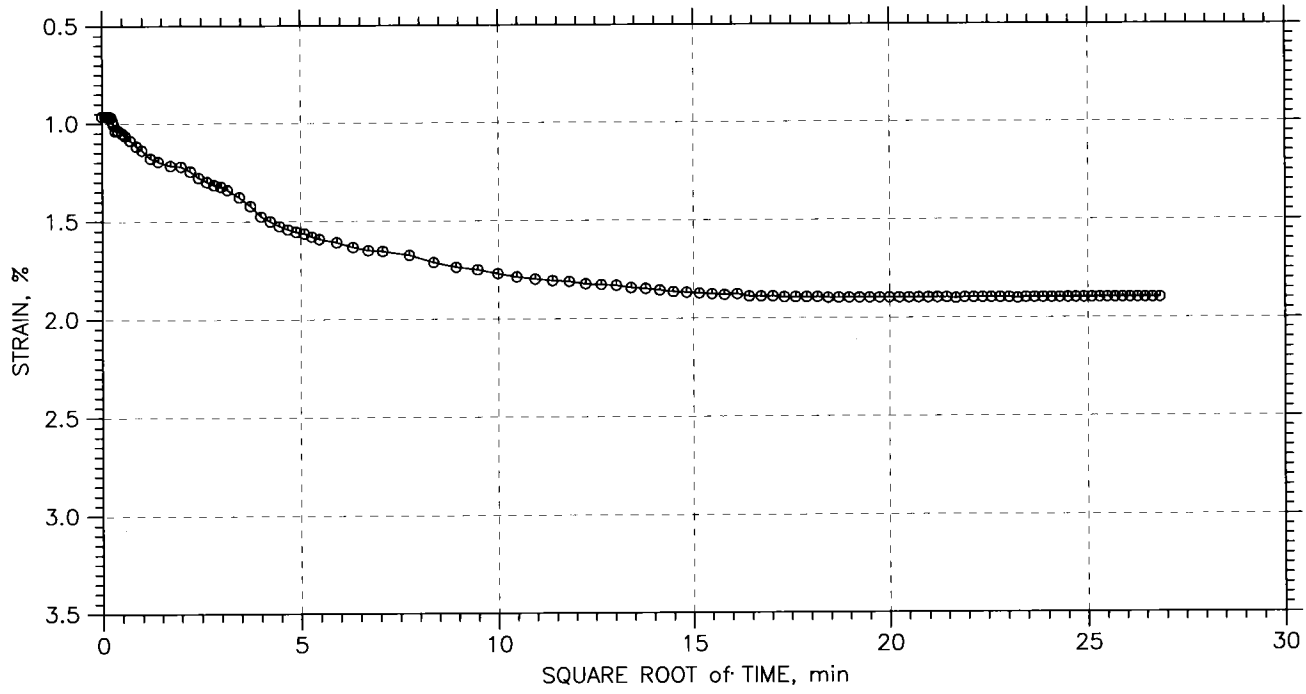
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 40. psf





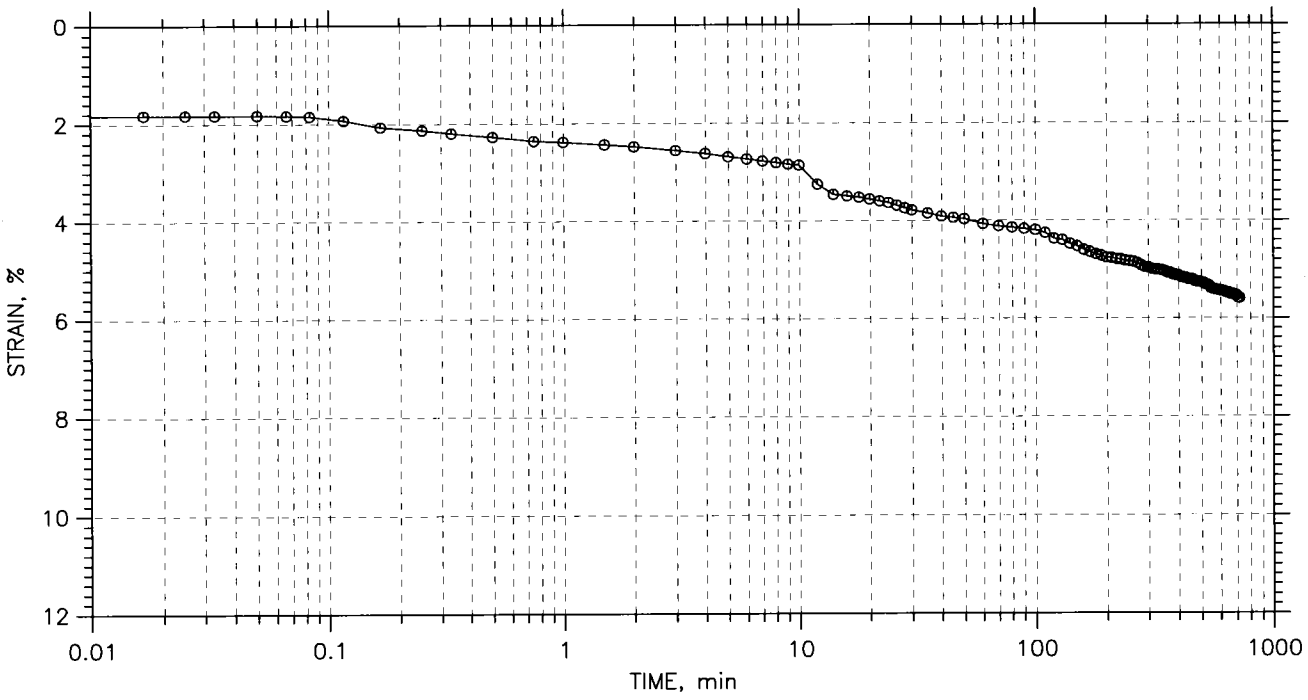
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

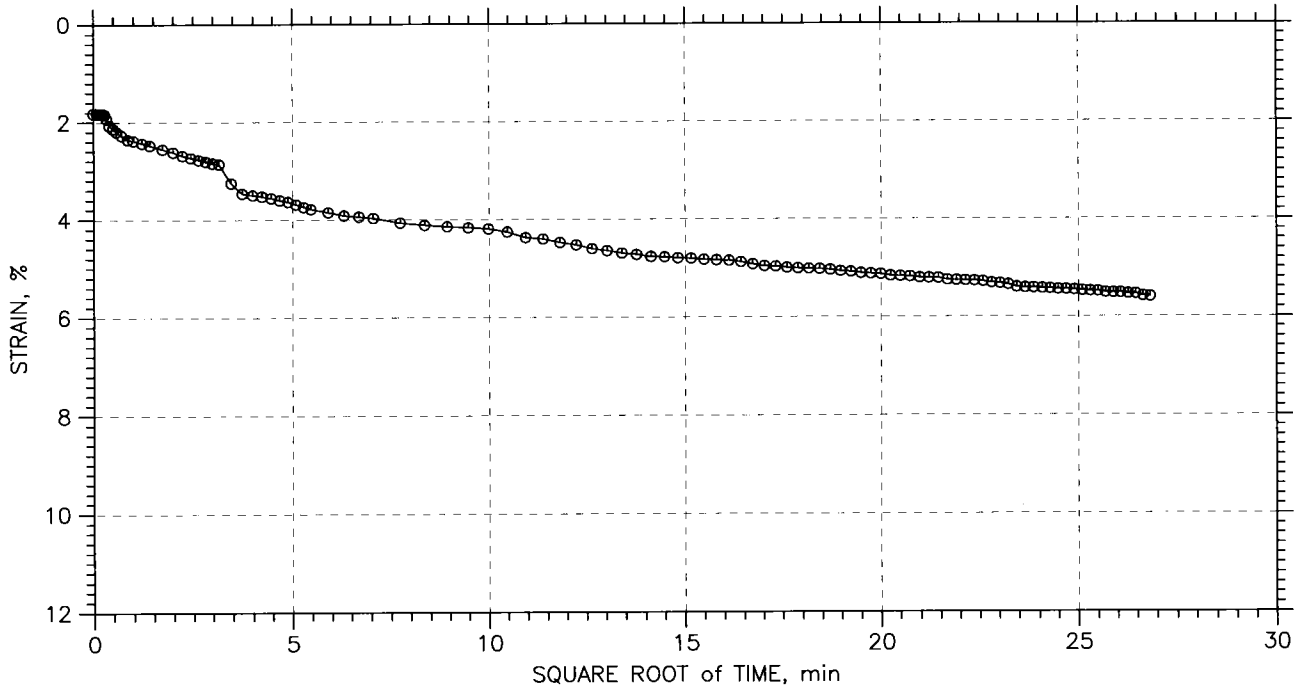
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 80. psf





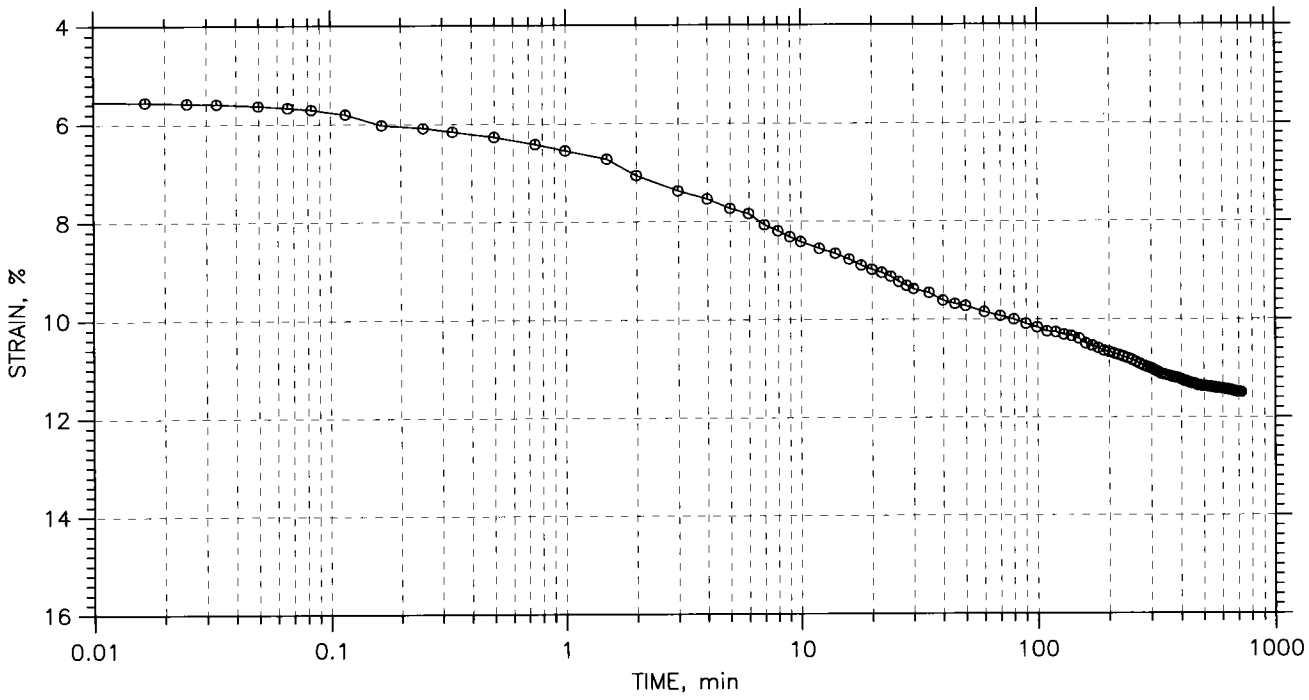
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

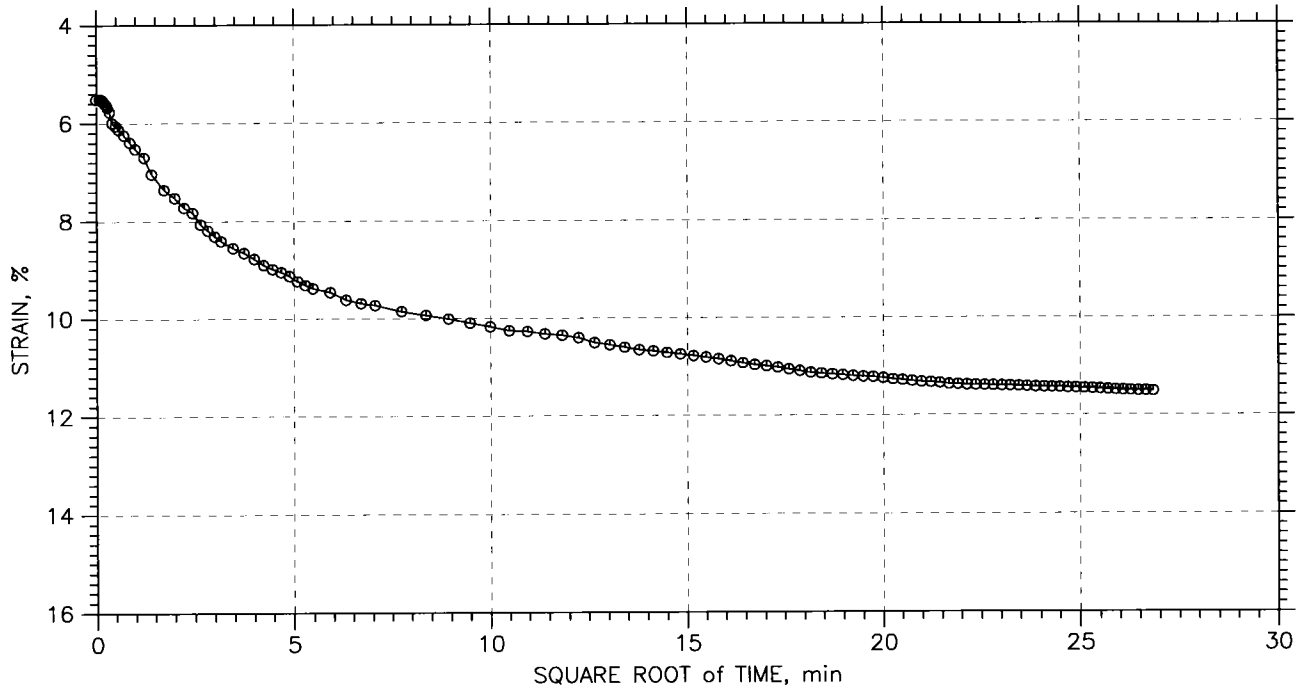
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 160. psf





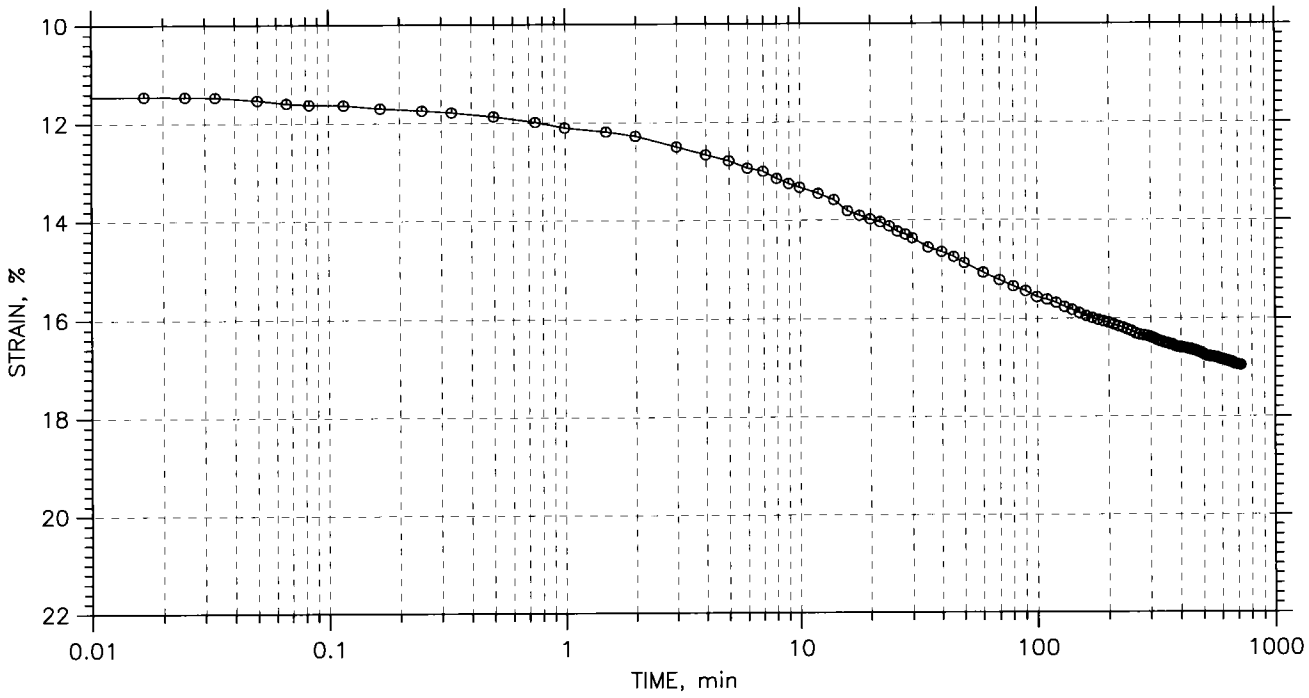
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

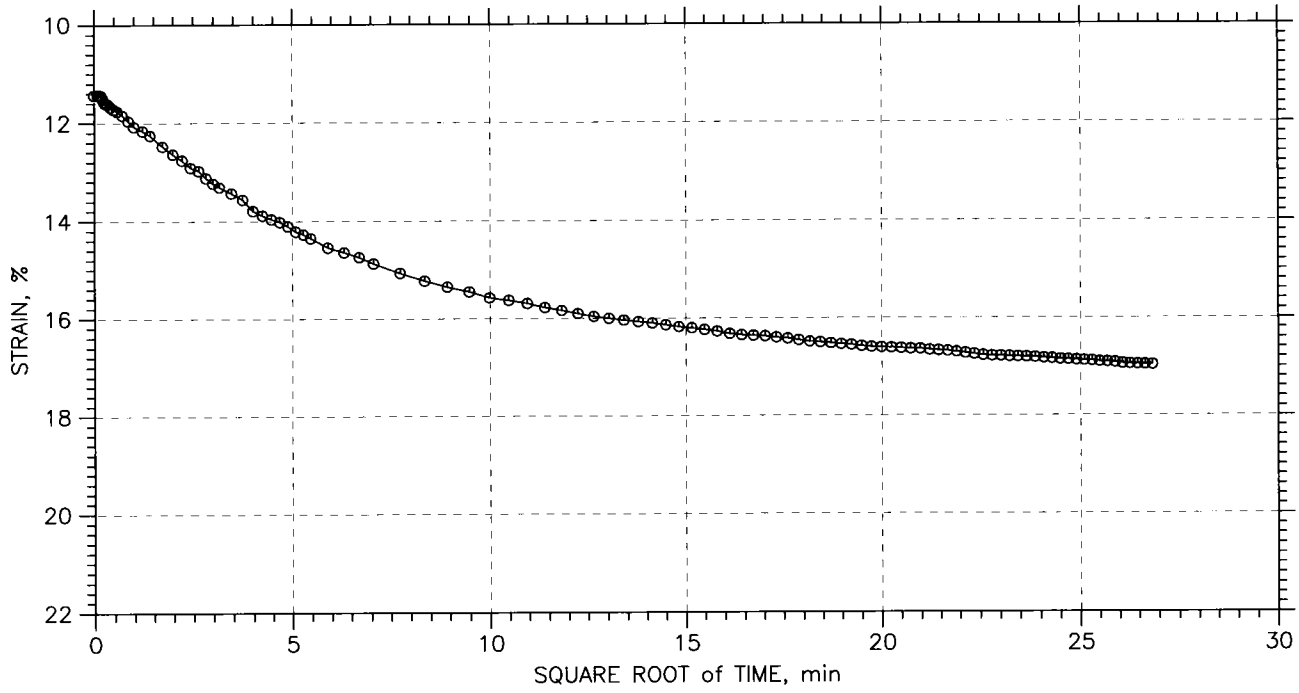
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 320. psf





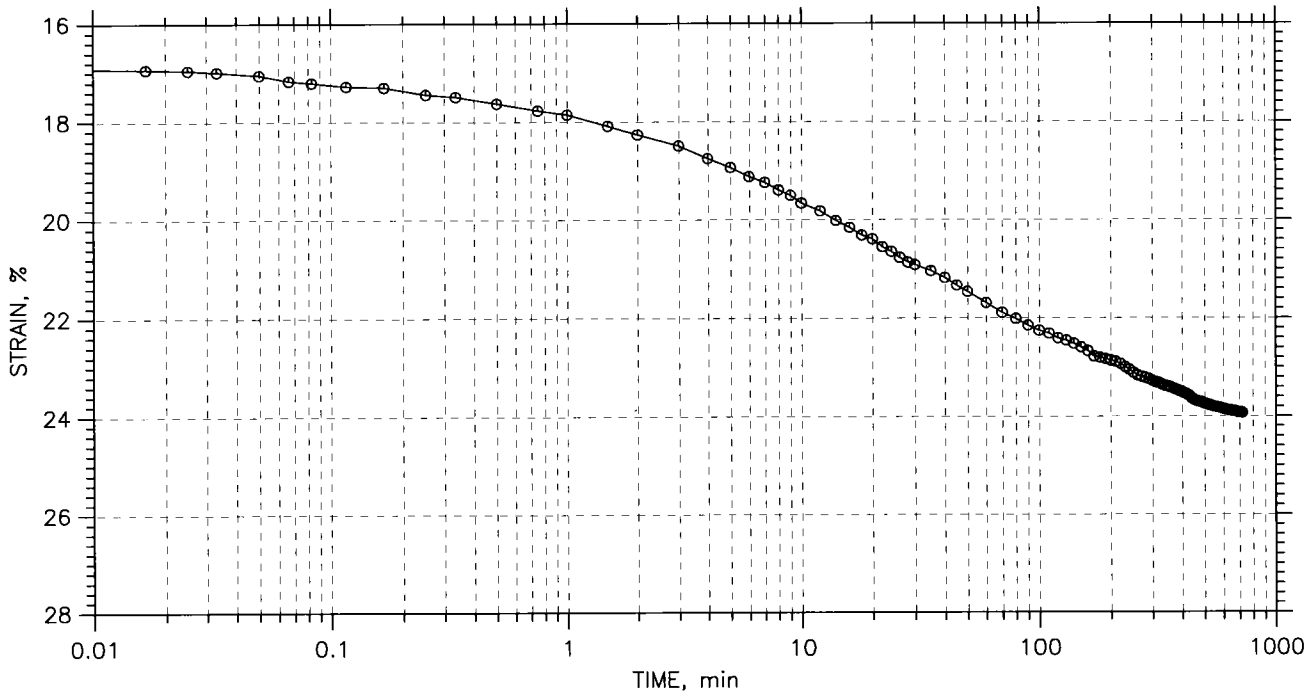
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

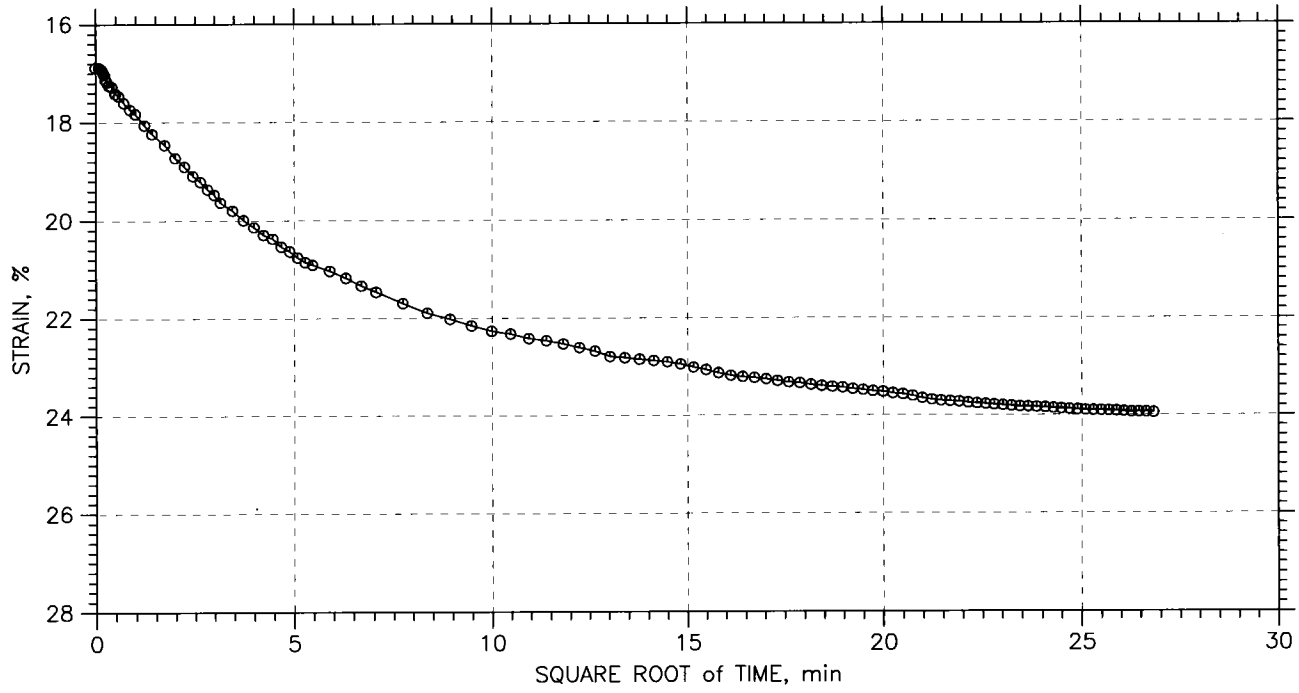
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 640. psf





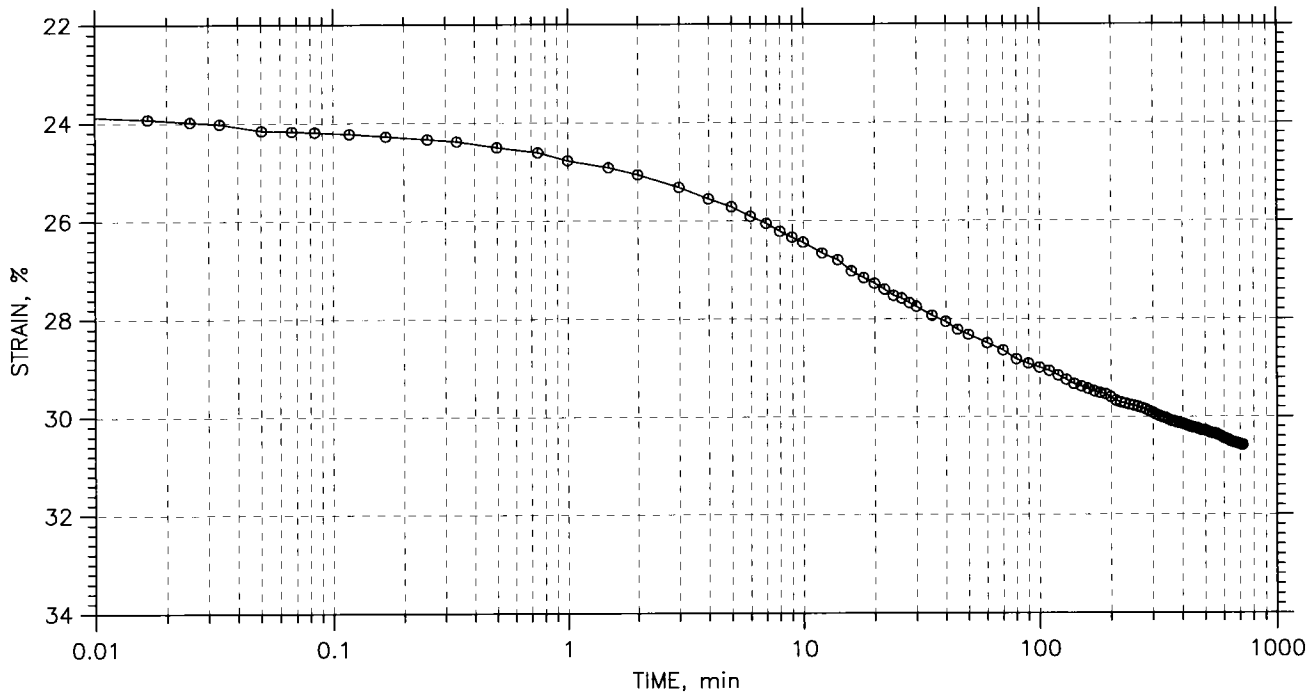
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

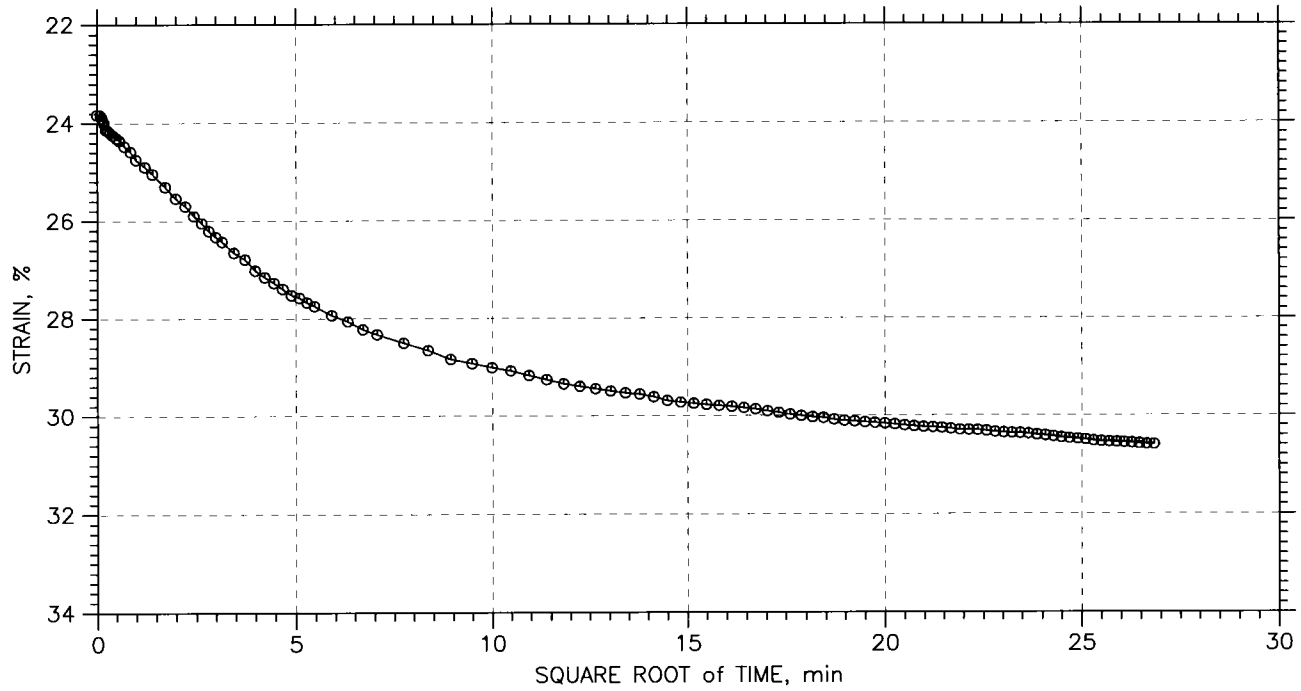
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 1280. psf





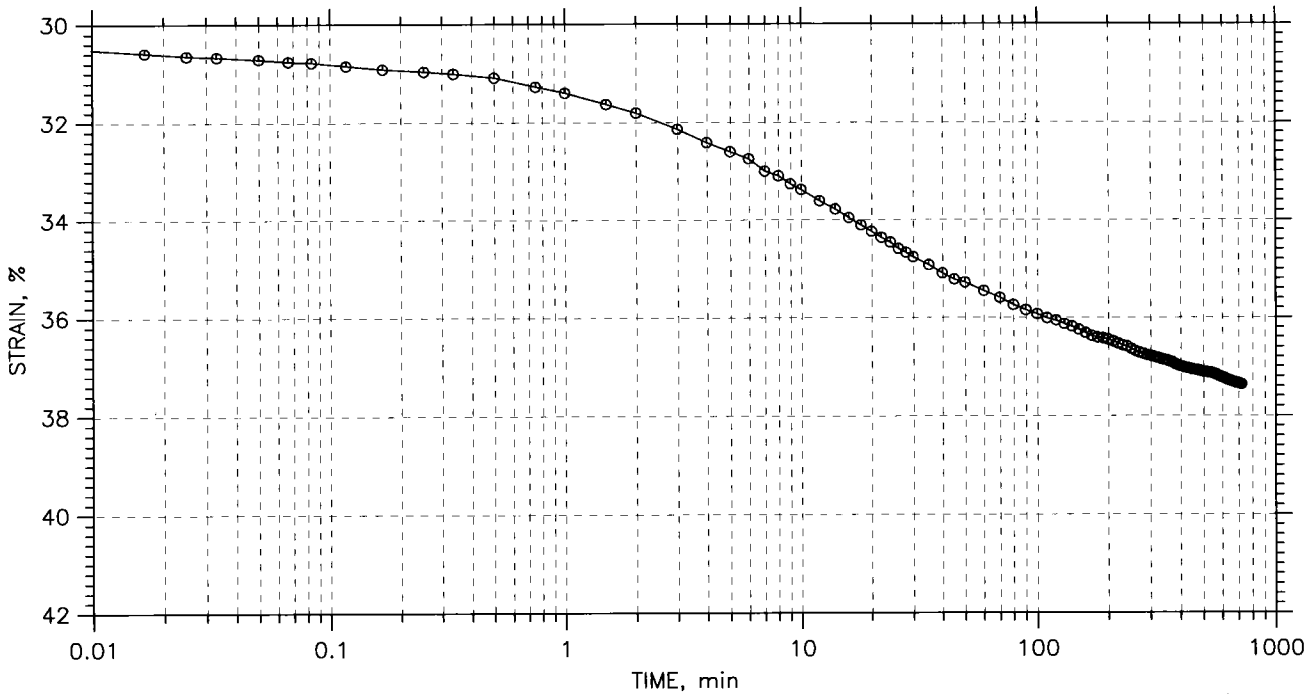
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

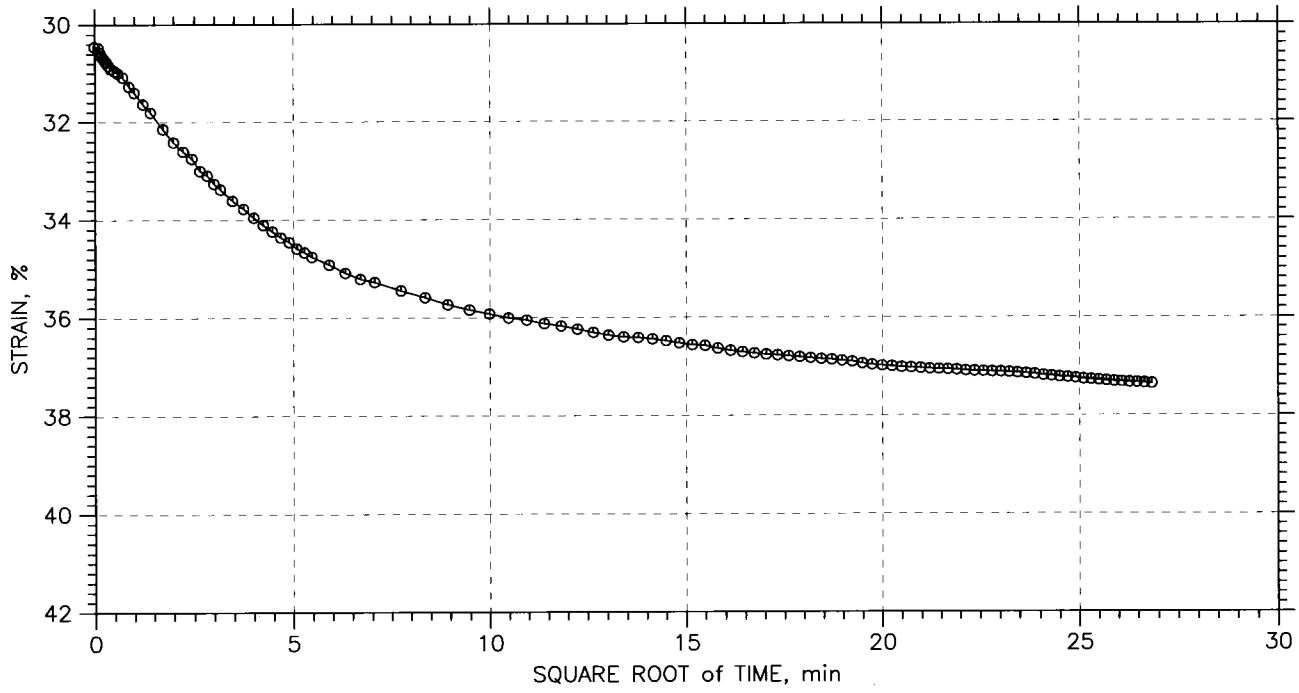
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 2560. psf





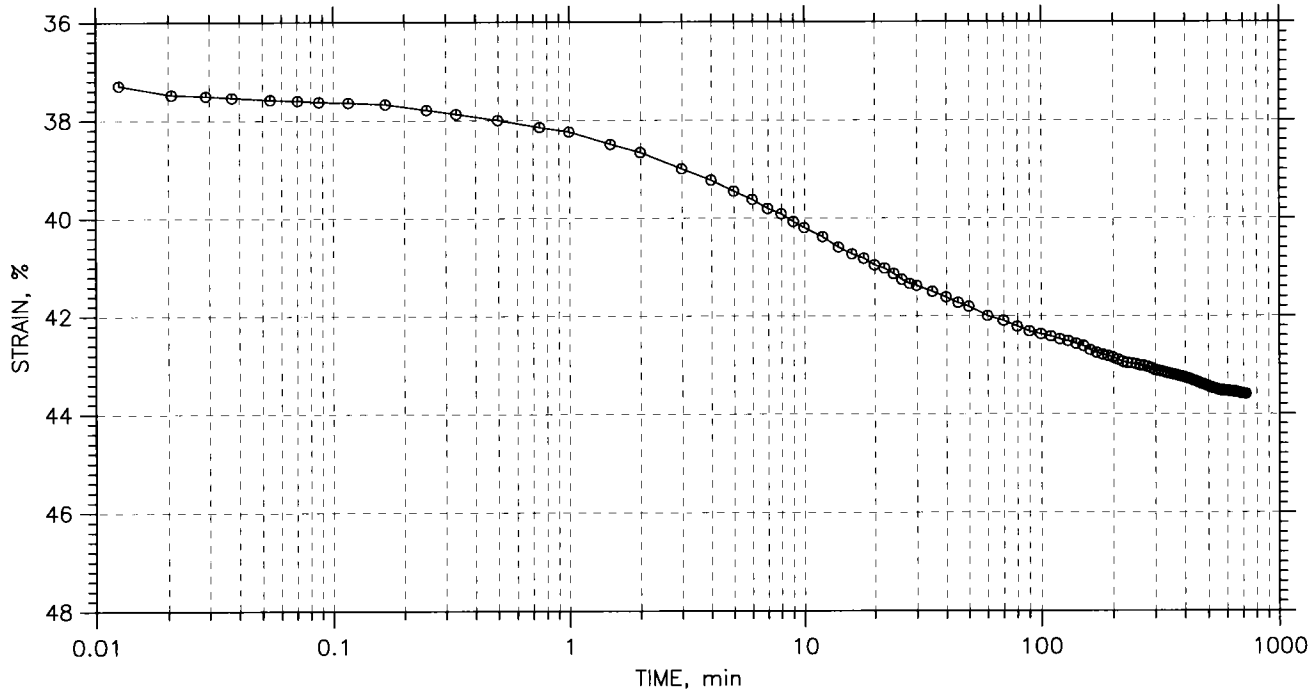
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

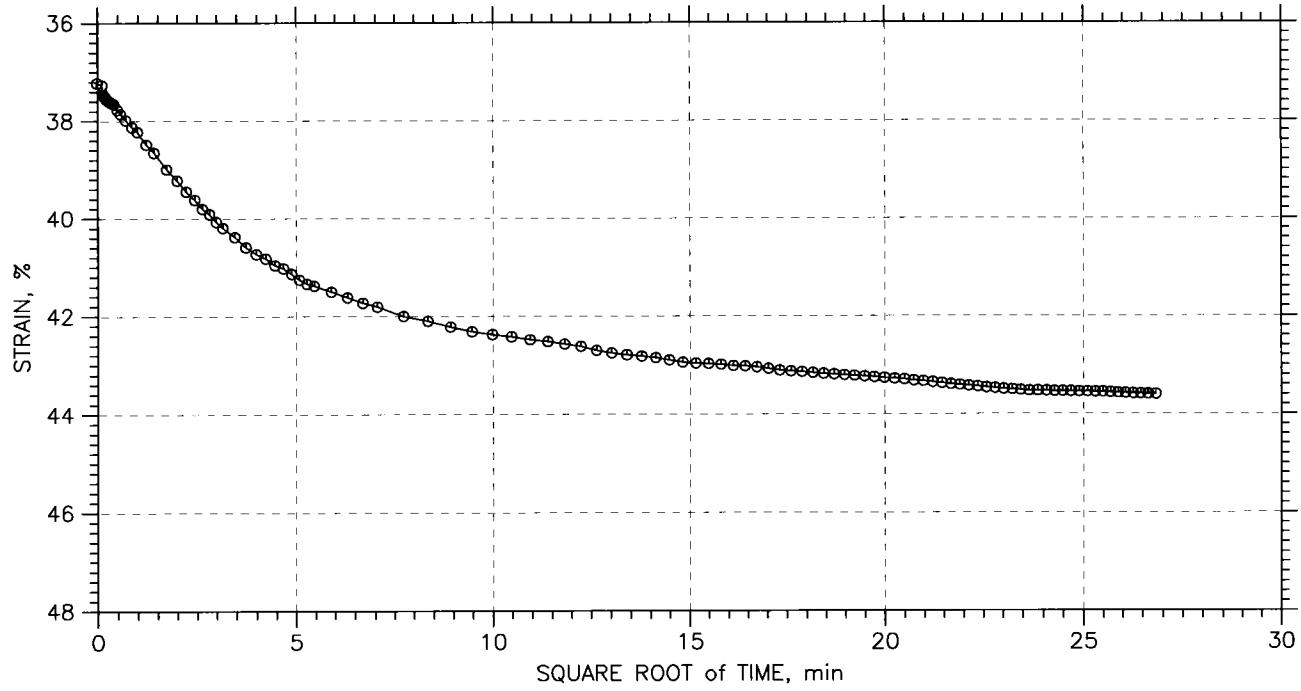
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 5120. psf





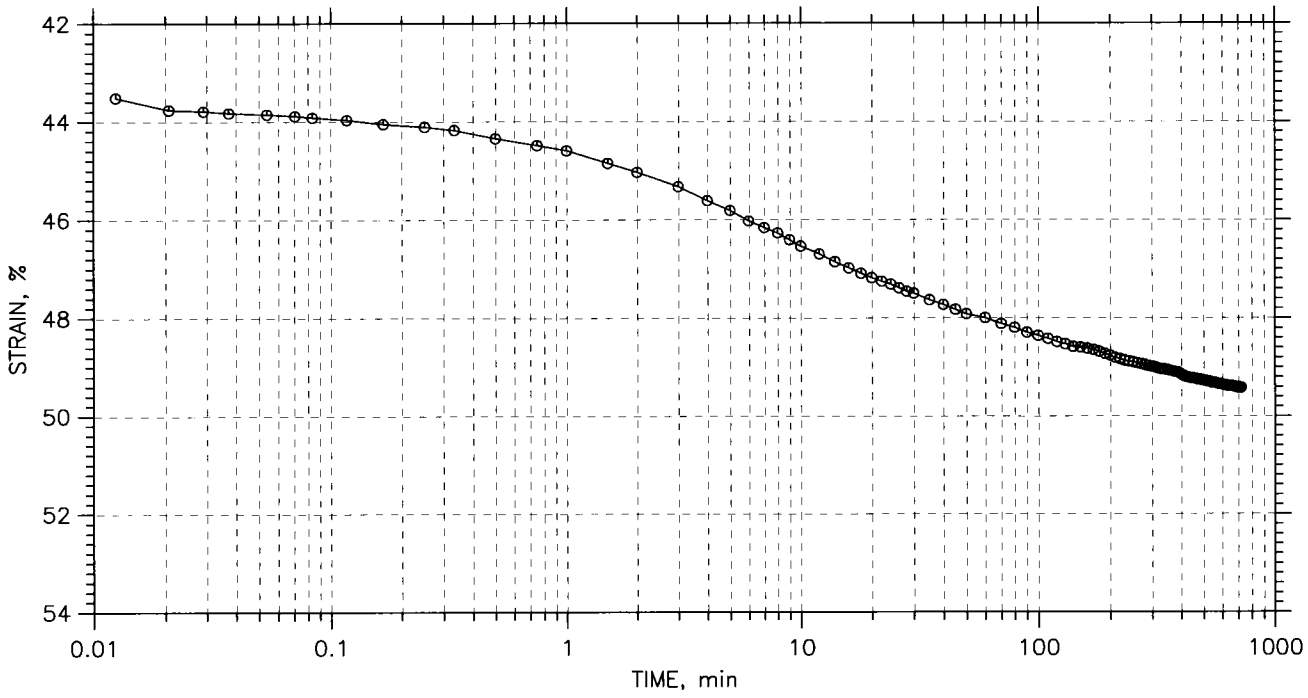
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

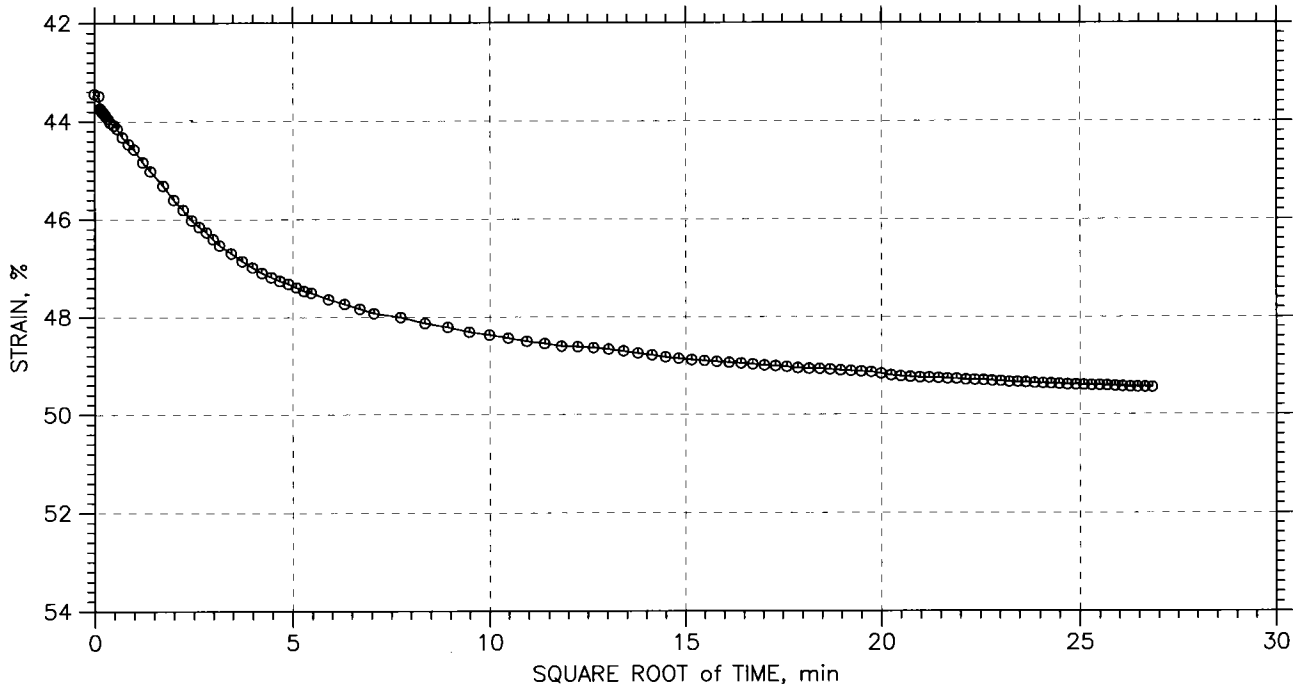
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 10240 psf





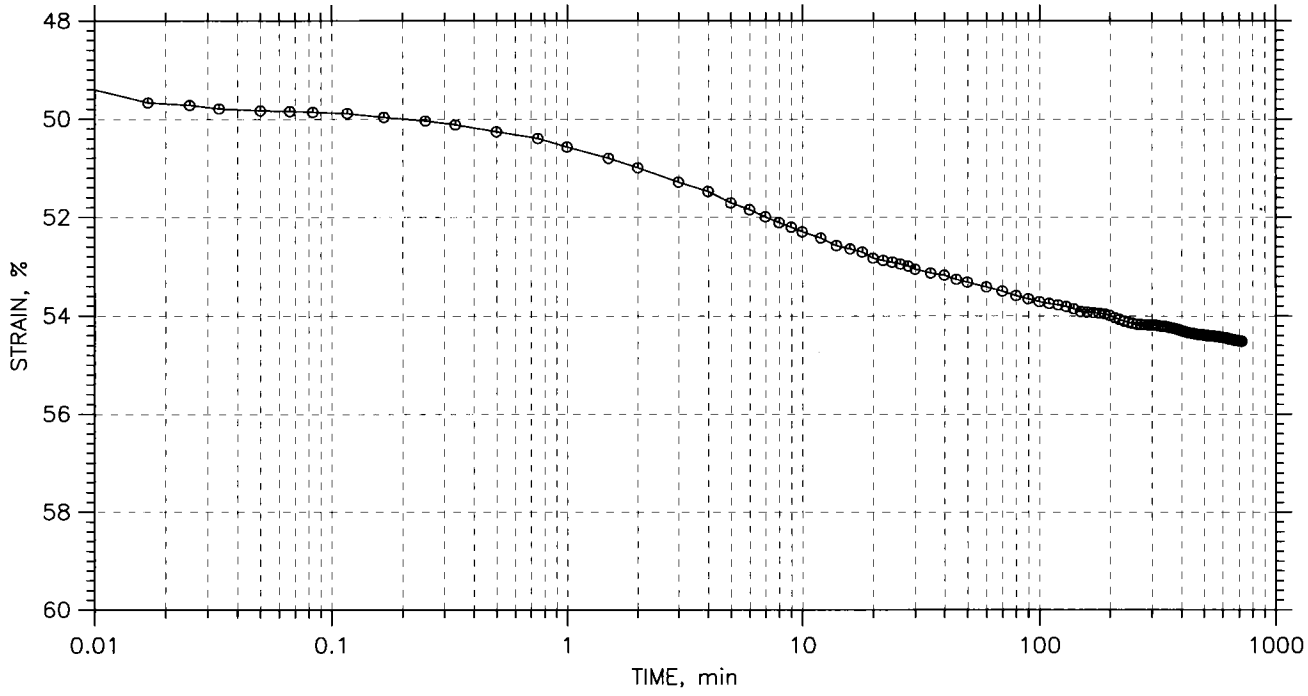
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

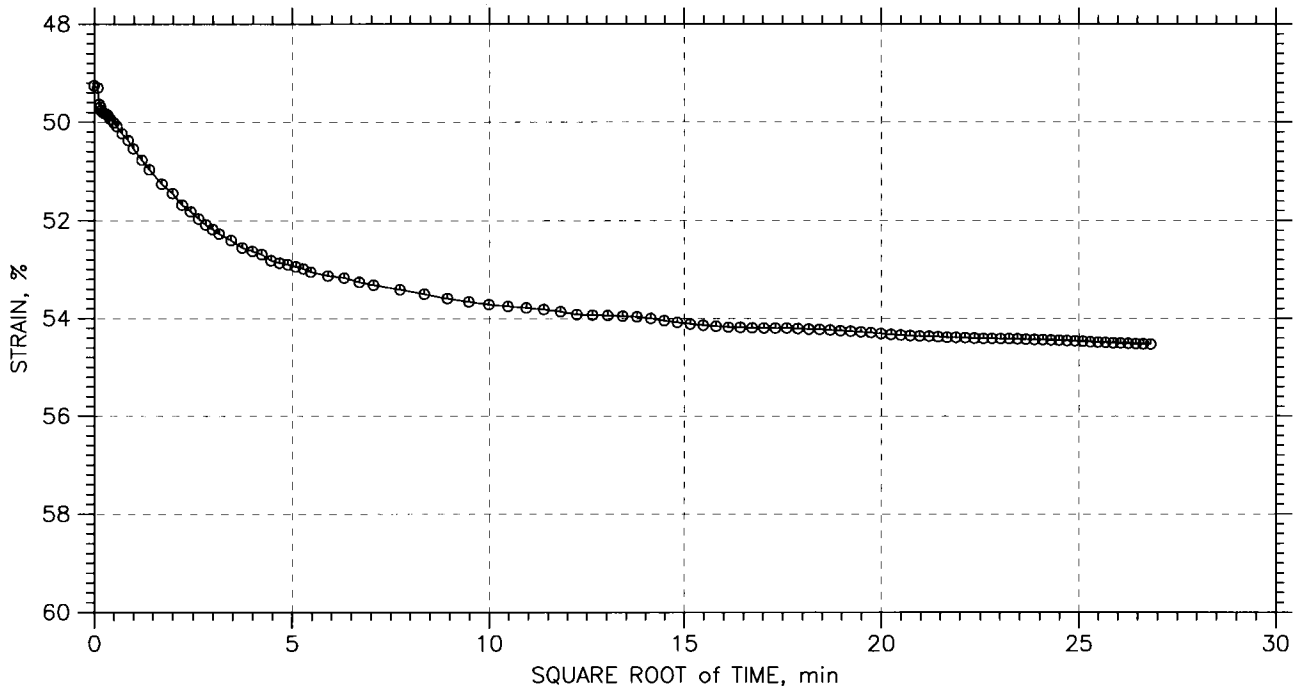
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 20480 psf

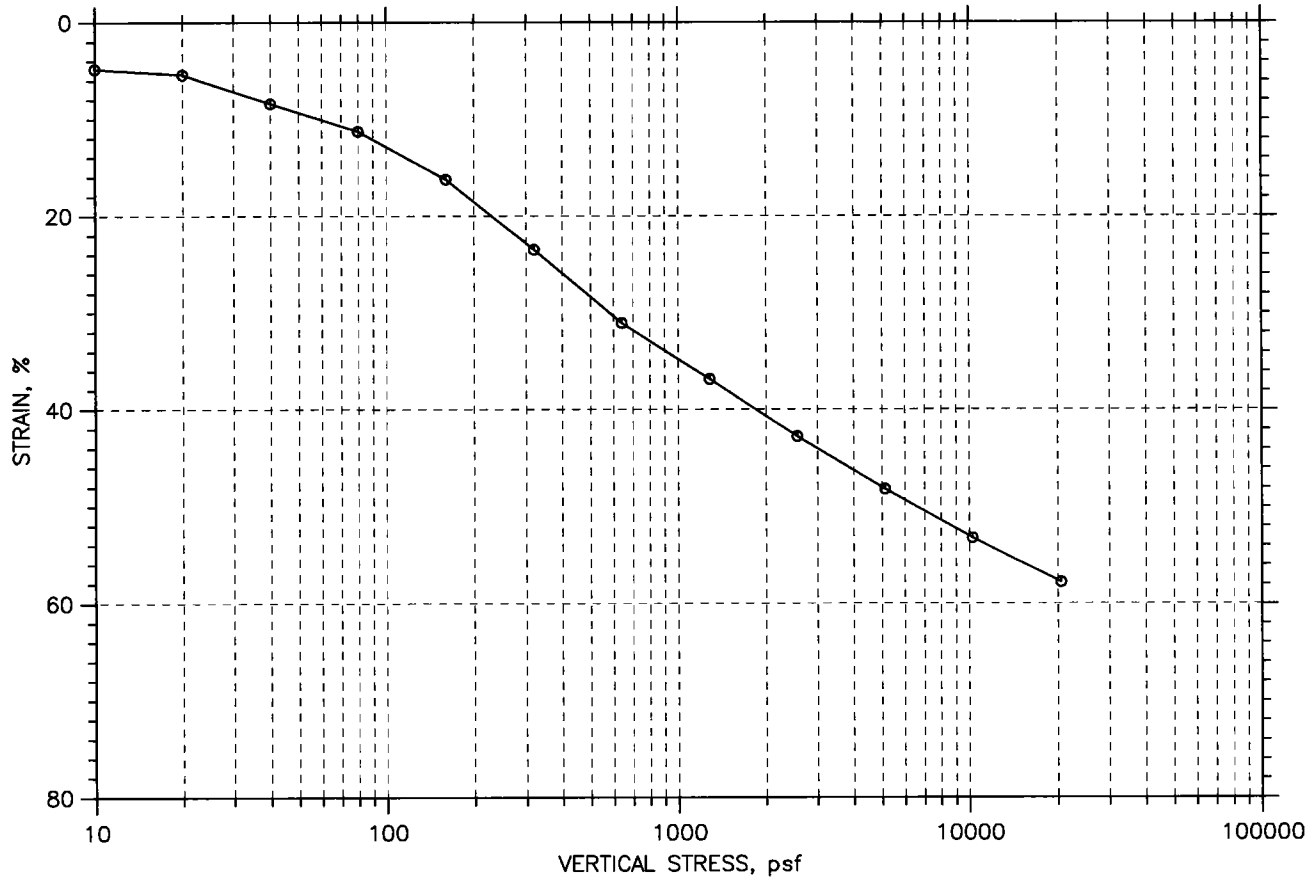


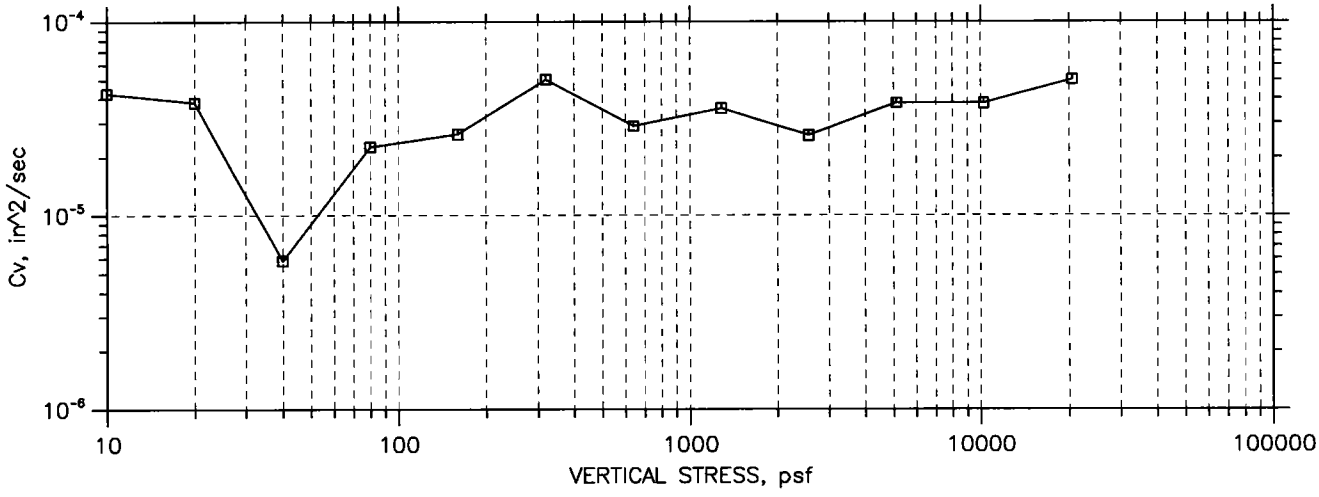


GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 3-04	Test Date: 08/18/09	Depth: ---
	Test No.: C-5	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

CONSOLIDATION TEST DATA

SUMMARY REPORT

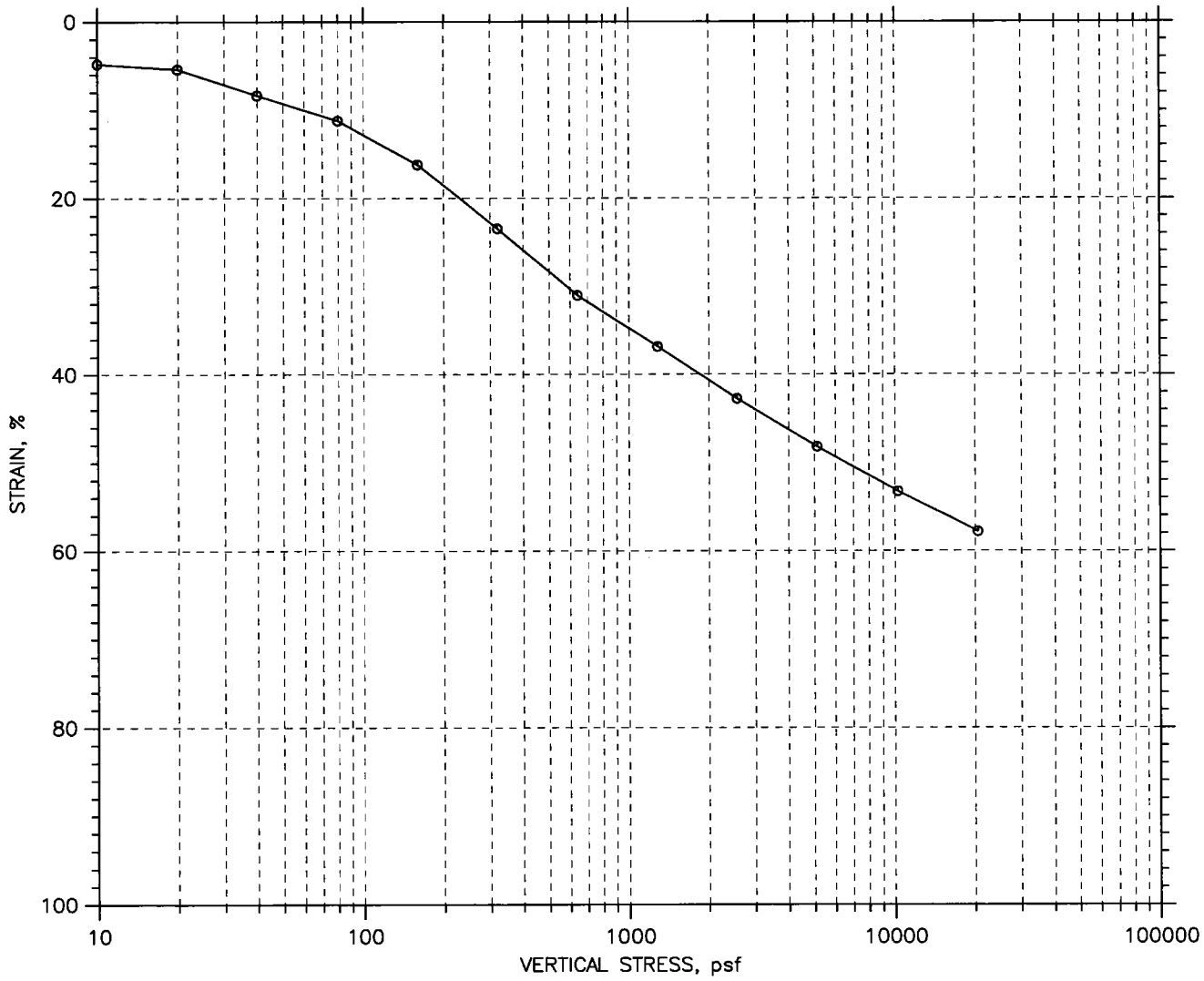




GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT



					Before Test	After Test
Overburden Pressure: ---				Water Content, %	123.60	32.76
Preconsolidation Pressure: ---				Dry Unit Weight, pcf	39.43	93.46
Compression Index: ---				Saturation, %	99.44	100.00
Diameter: 2.5 in		Height: 1 in		Void Ratio	3.65	0.96
LL: ---	PL: ---	PI: ---	GS: 2.94			

GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 5-04
Test No.: C-6

Location: Boston, MA
Tested By: md
Test Date: 08/24/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth:
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

Estimated Specific Gravity: 2.94
Initial Void Ratio: 3.65
Final Void Ratio: 0.96

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.00 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	4105	RING		3808
Wt. Container + Wet Soil, gm	272.79	329.2	283.05	77.17
Wt. Container + Dry Soil, gm	128.93	266.4	266.4	60.32
Wt. Container, gm	8.49	215.6	215.6	8.89
Wt. Dry Soil, gm	120.44	50.805	50.805	51.43
Water Content, %	119.45	123.60	32.76	32.76
Void Ratio	---	3.65	0.96	---
Degree of Saturation, %	---	99.44	100.00	---
Dry Unit Weight, pcf	---	39.429	93.456	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 5-04
Test No.: C-6

Location: Boston, MA
Tested By: md
Test Date: 08/24/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth:
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

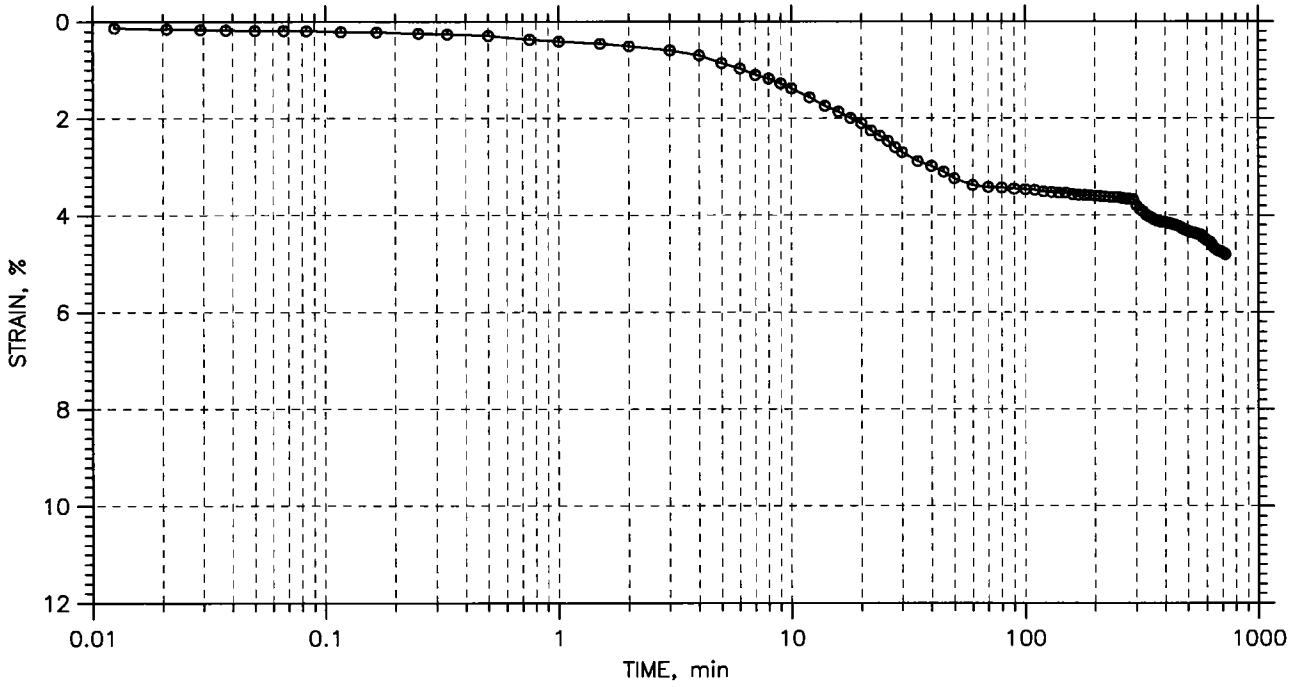
	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	10	0.04807	3.428	4.81	18.4	0.0	4.26e-005	0.00e+000	4.26e-005
2	20	0.05395	3.401	5.39	19.4	0.0	3.82e-005	0.00e+000	3.82e-005
3	40	0.08372	3.262	8.37	122.0	0.0	5.84e-006	0.00e+000	5.84e-006
4	80	0.1124	3.129	11.24	29.6	0.0	2.26e-005	0.00e+000	2.26e-005
5	160	0.1621	2.898	16.21	23.3	0.0	2.62e-005	0.00e+000	2.62e-005
6	320	0.2346	2.561	23.46	9.7	11.4	5.46e-005	4.65e-005	5.02e-005
7	640	0.3104	2.208	31.04	17.4	12.8	2.51e-005	3.41e-005	2.89e-005
8	1.28e+003	0.3685	1.938	36.85	12.5	7.7	2.88e-005	4.68e-005	3.56e-005
9	2.56e+003	0.4275	1.663	42.75	16.3	6.7	1.82e-005	4.45e-005	2.59e-005
10	5.12e+003	0.482	1.410	48.20	8.0	4.9	3.07e-005	5.00e-005	3.80e-005
11	1.02e+004	0.5325	1.175	53.25	7.3	3.3	2.75e-005	6.04e-005	3.78e-005
12	2.05e+004	0.5781	0.963	57.81	3.7	2.8	4.41e-005	5.81e-005	5.02e-005

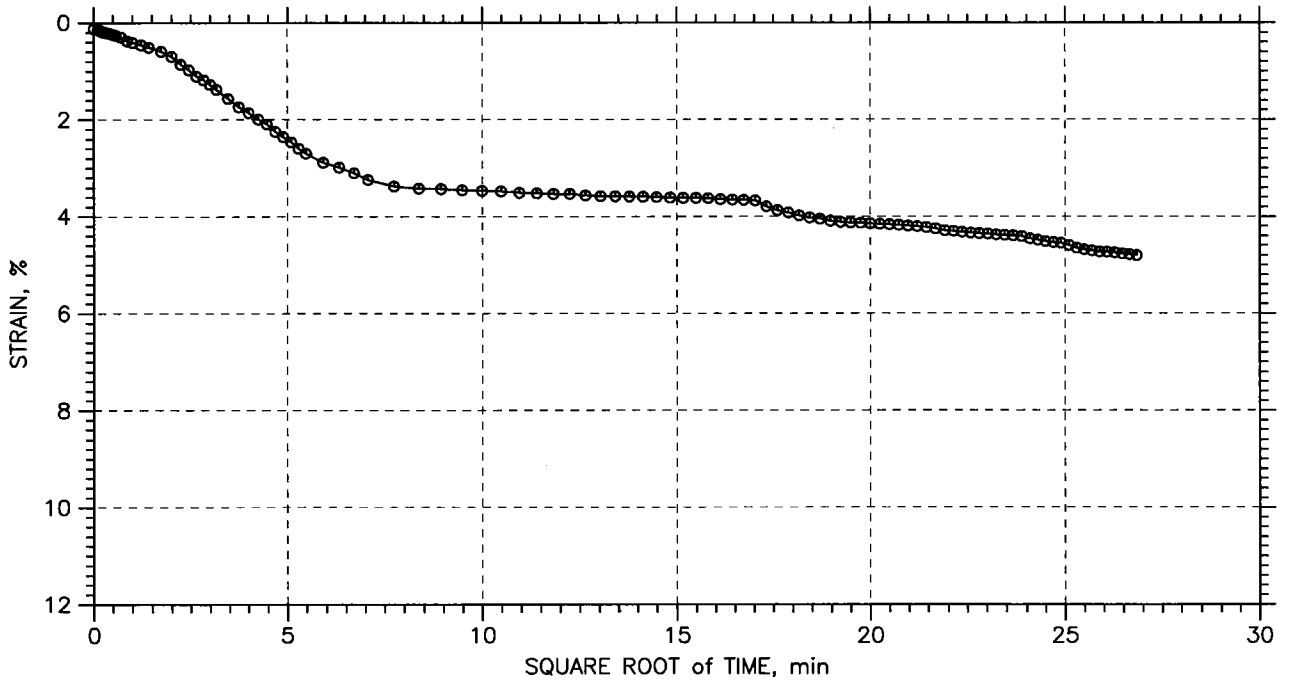
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 10. psf





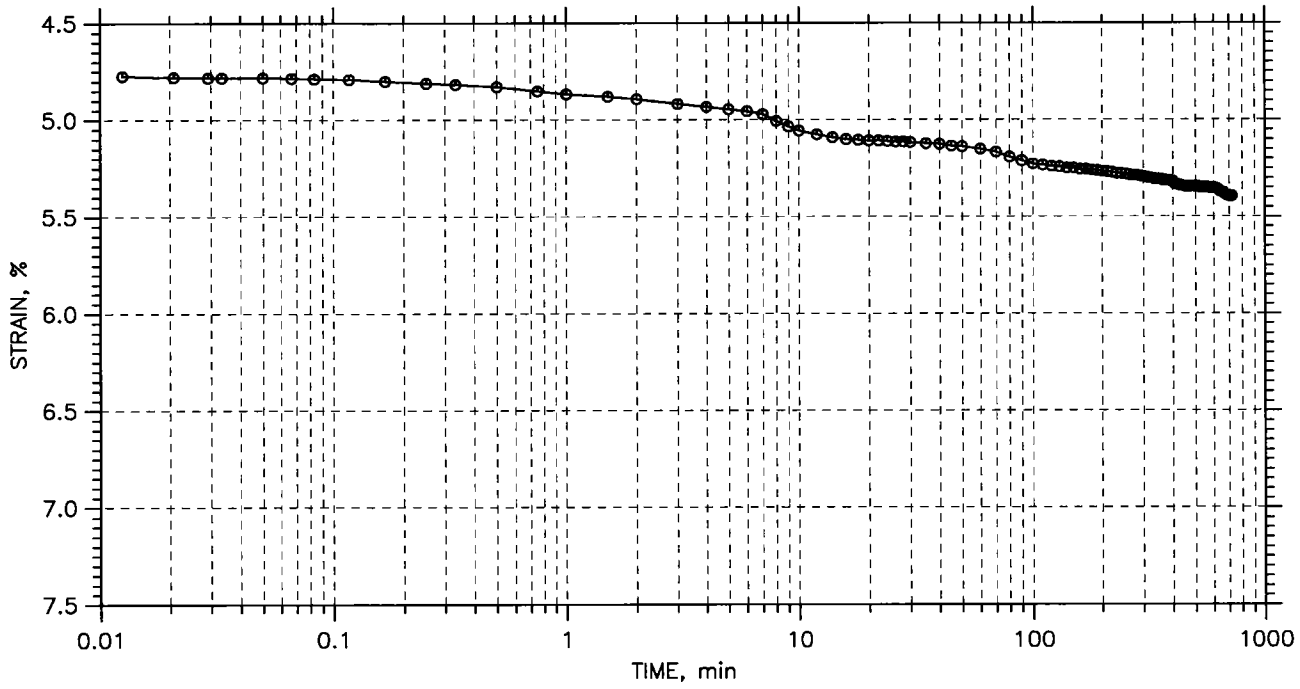
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

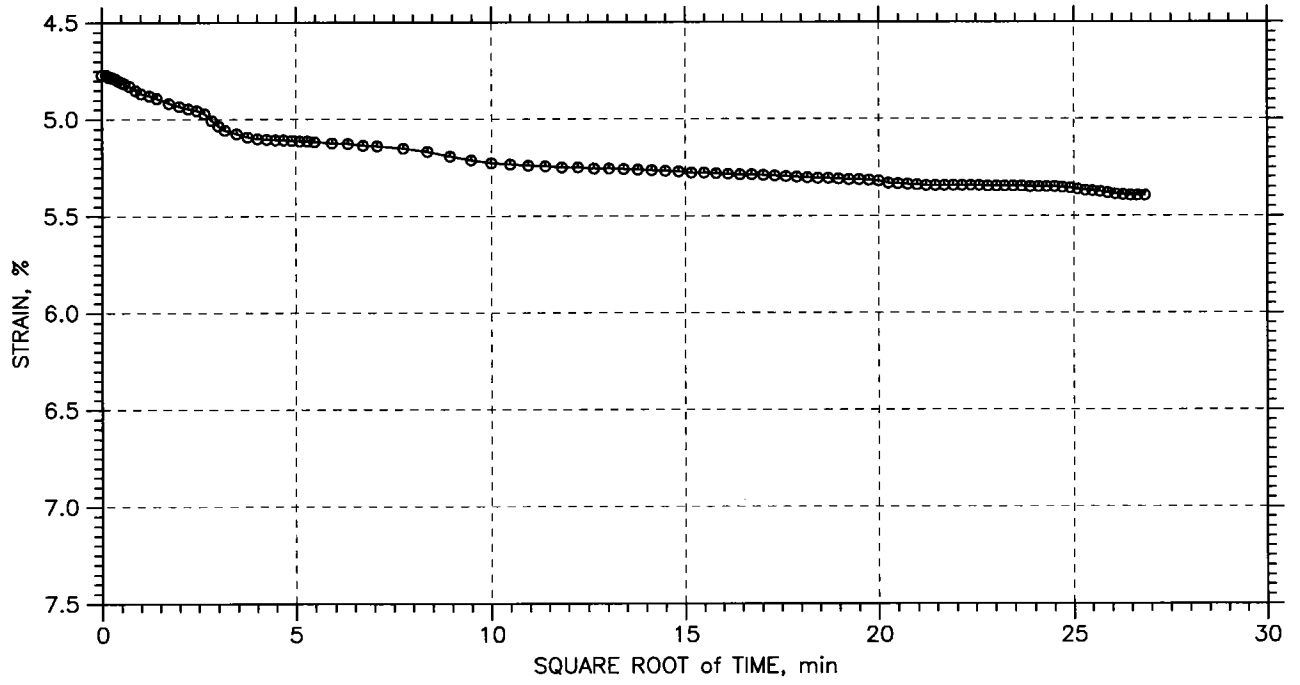
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 20. psf





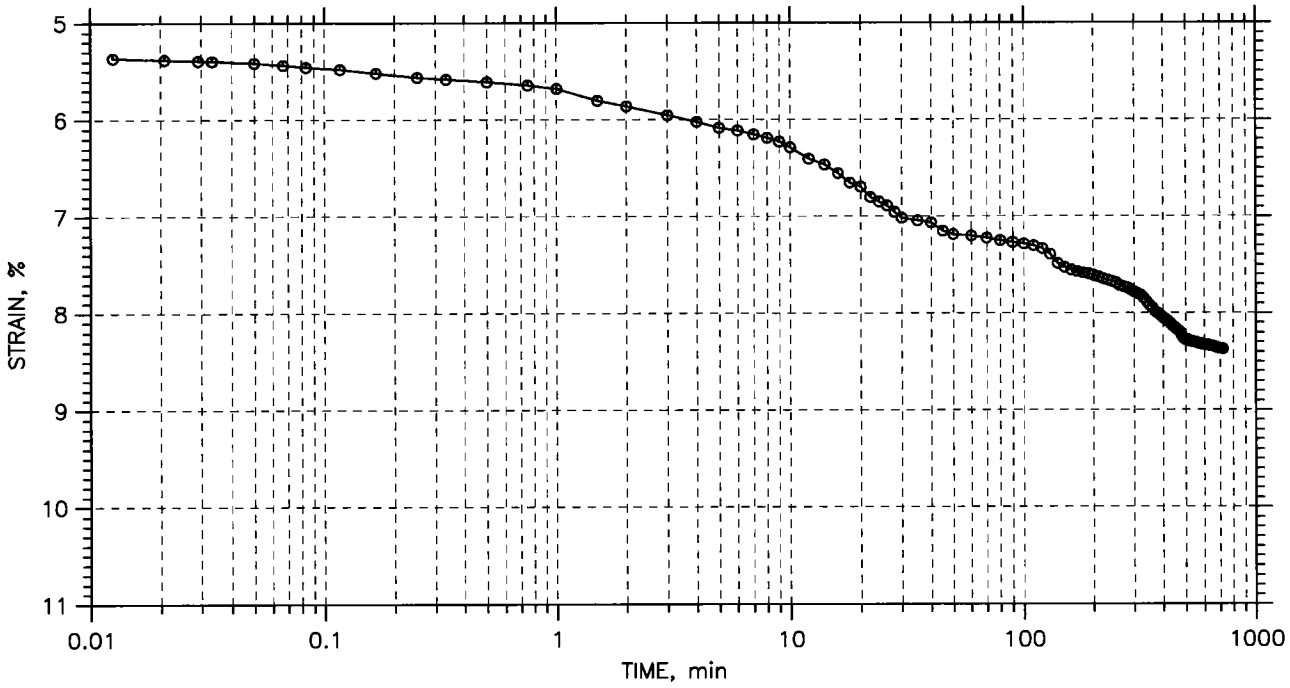
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

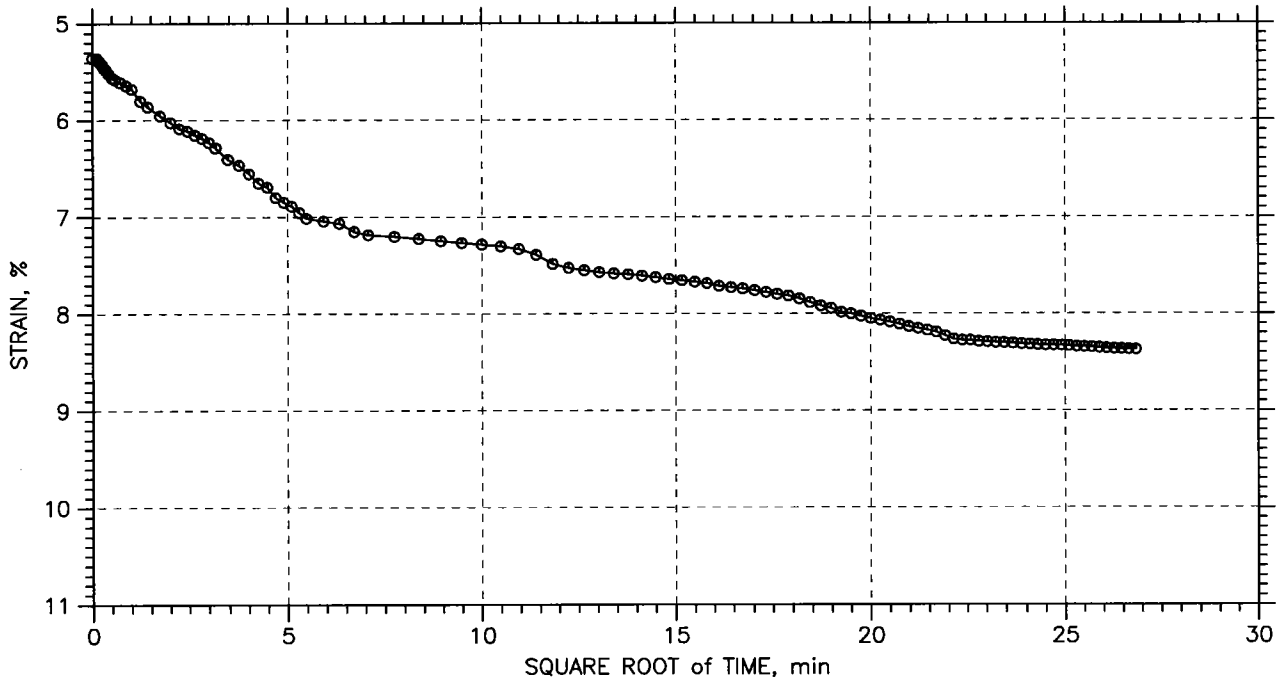
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 40. psf





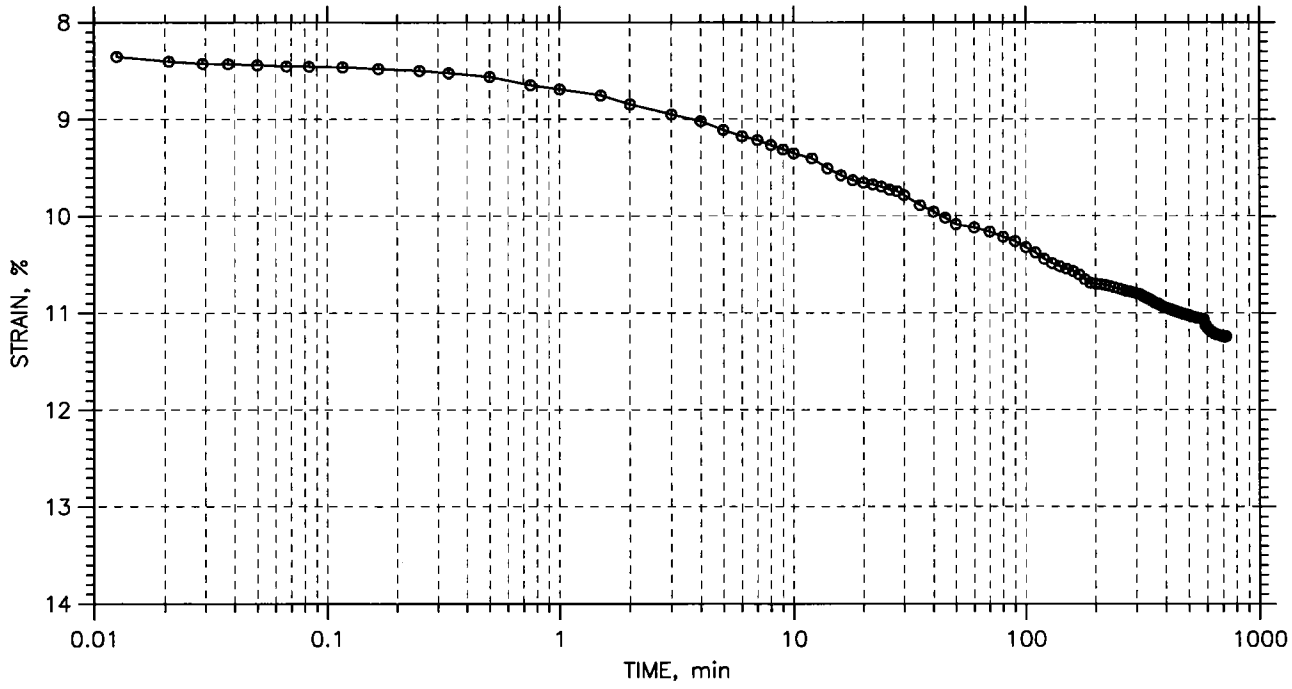
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

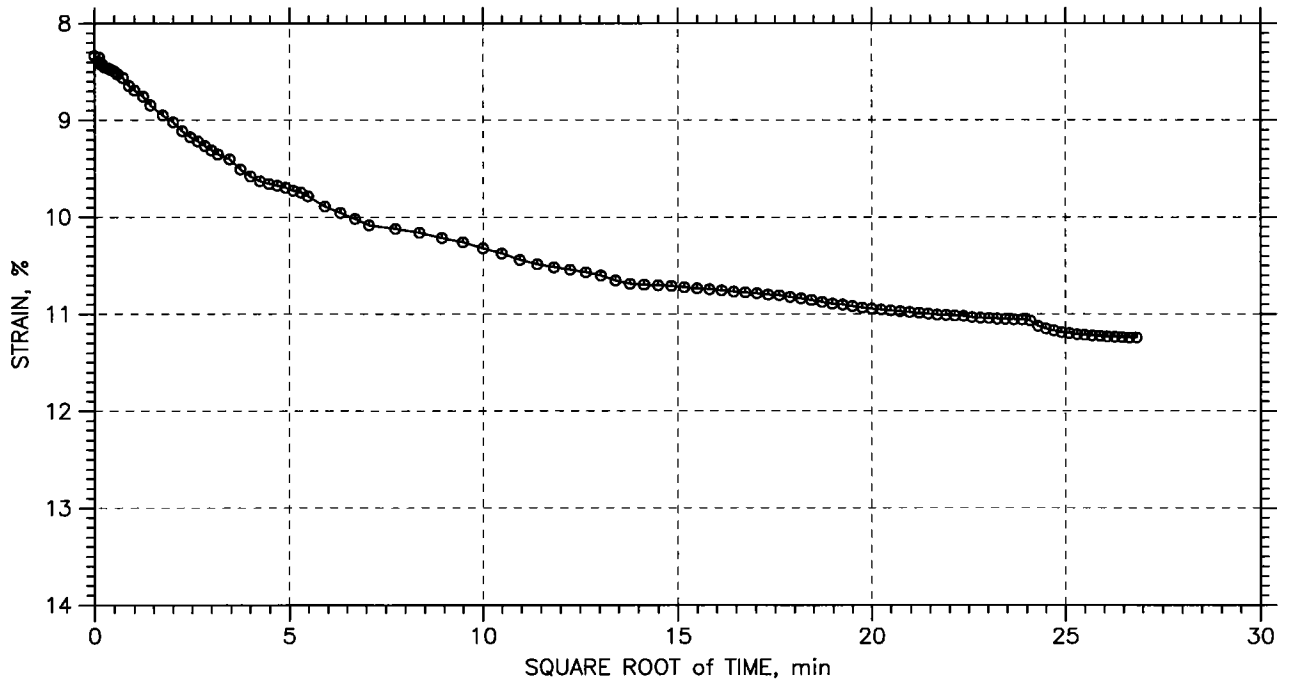
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 80. psf





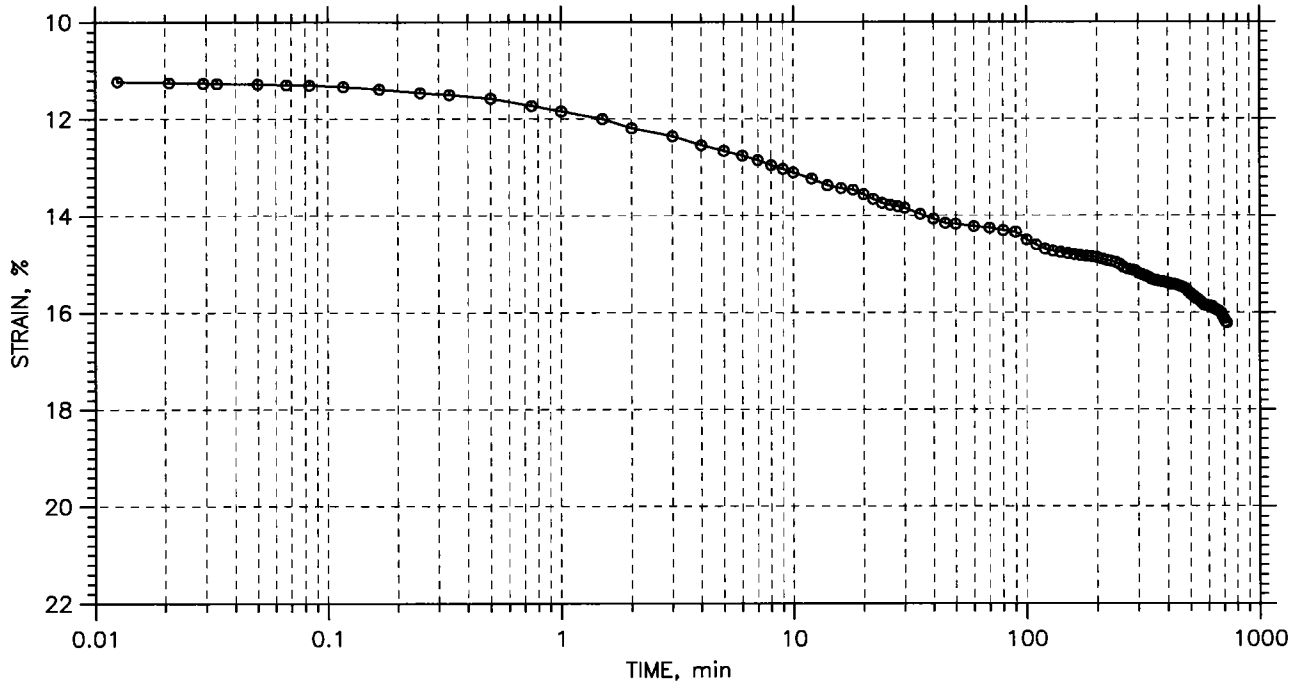
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

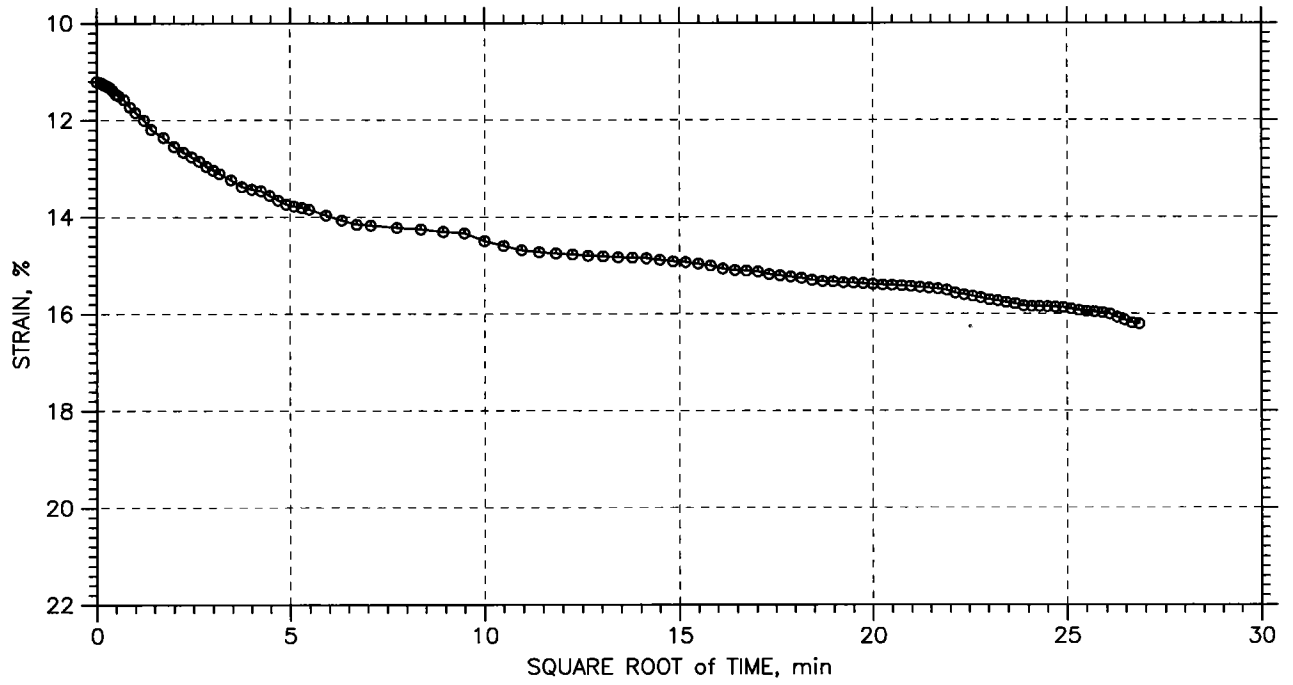
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 160. psf





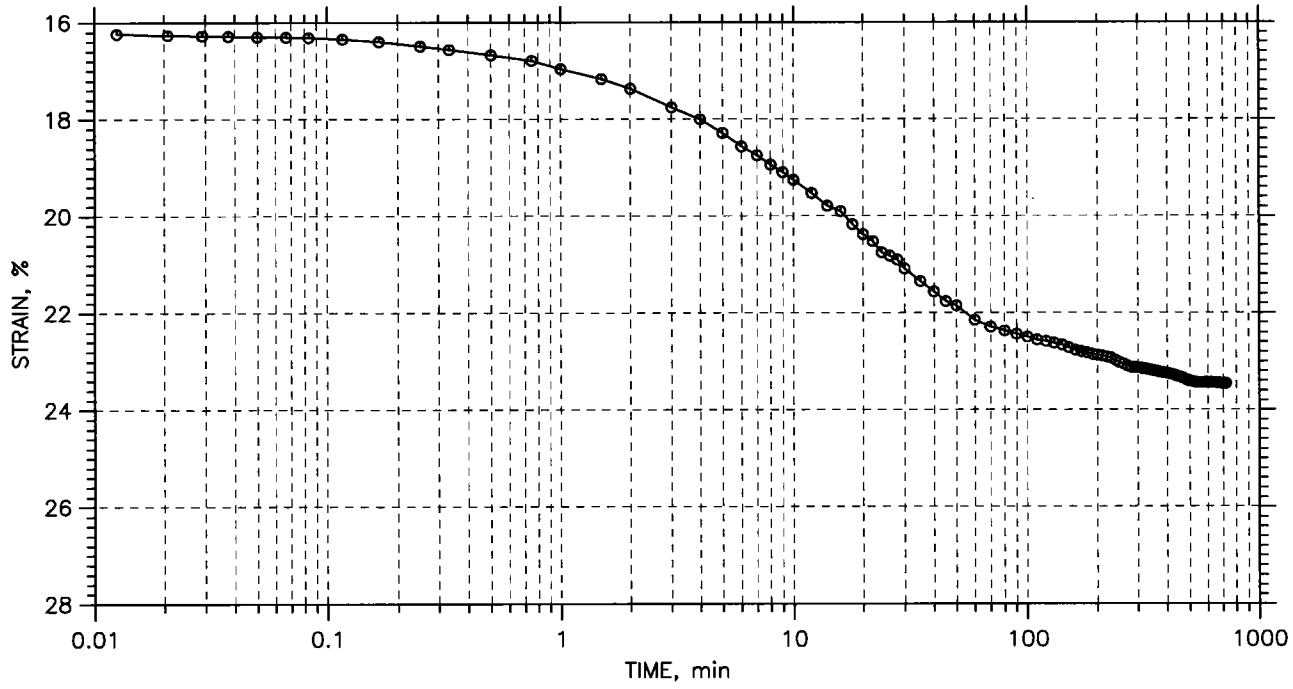
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

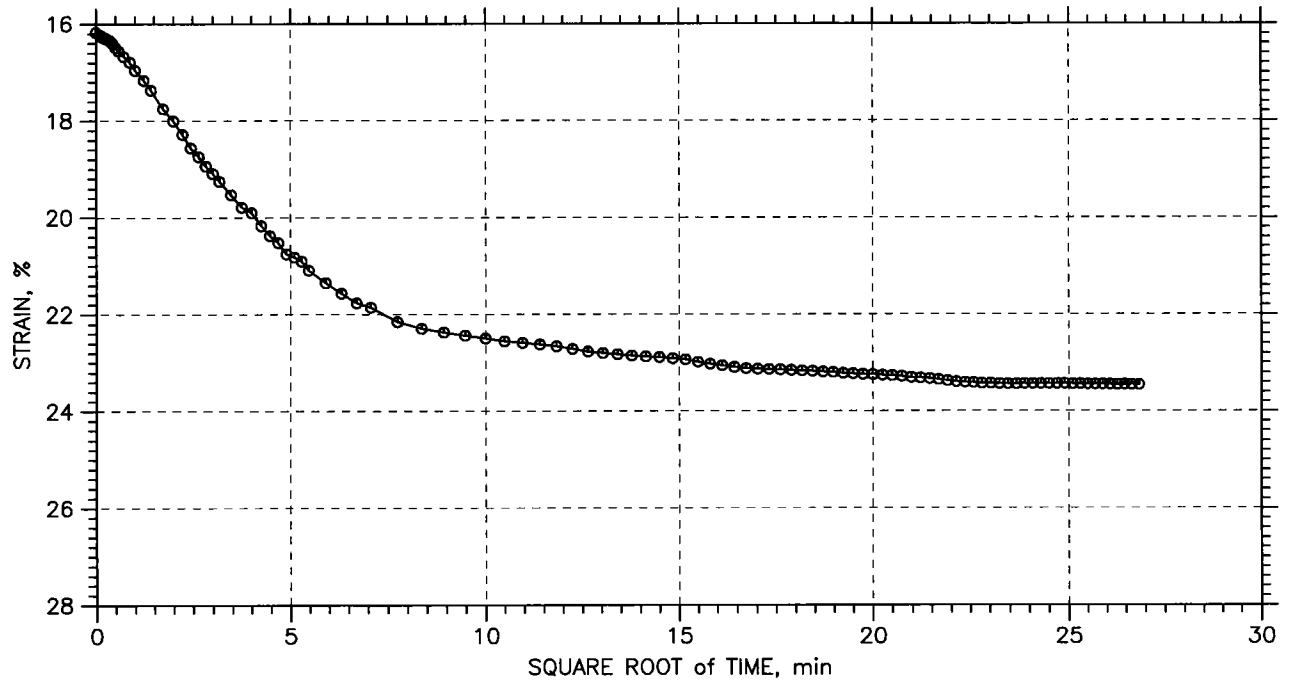
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 320. psf





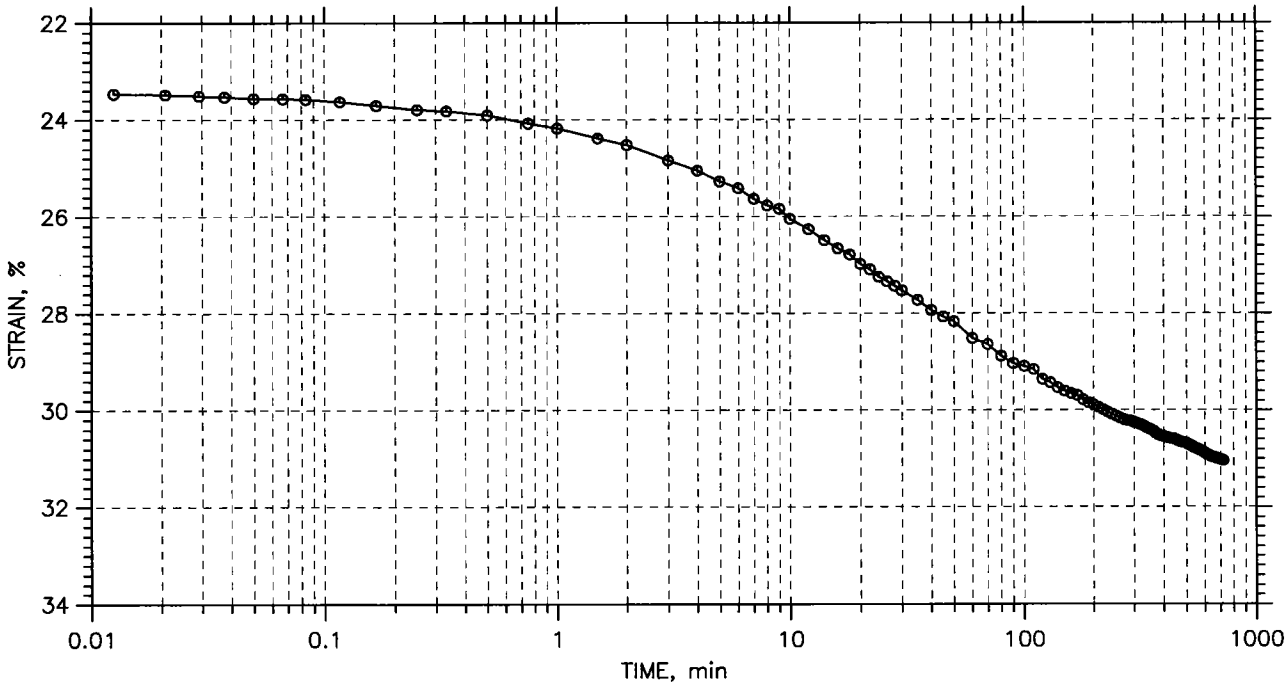
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

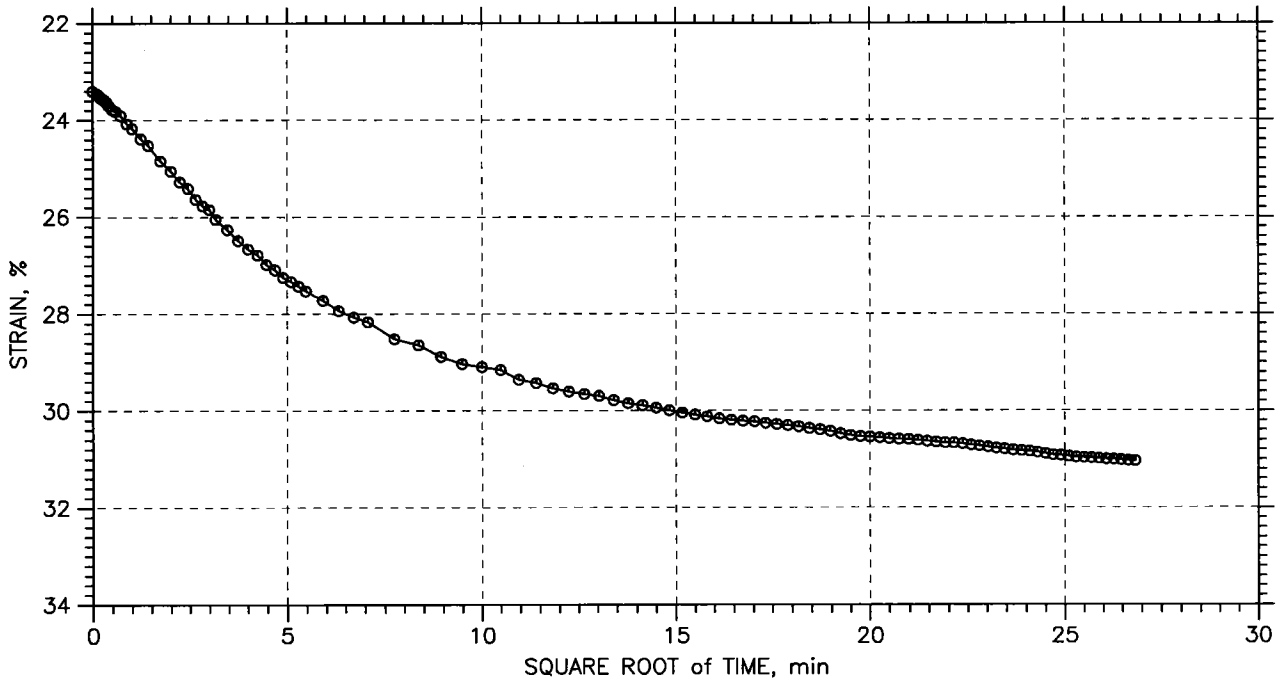
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 640. psf





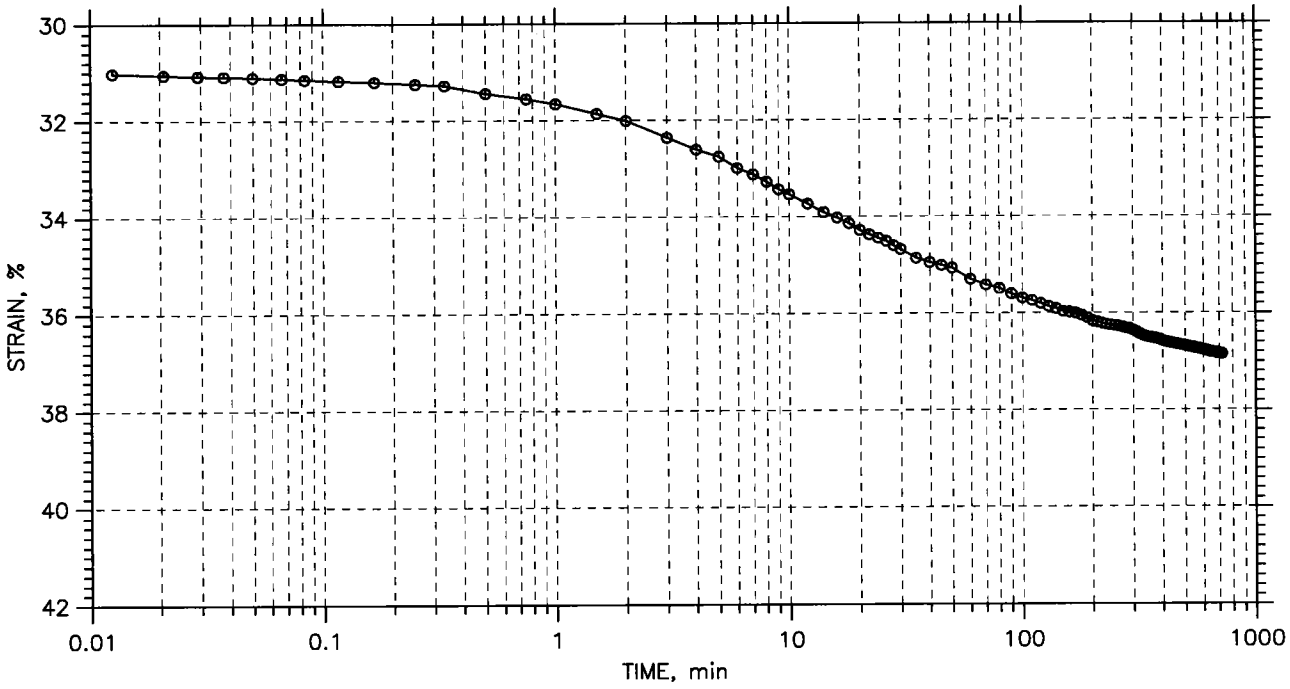
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

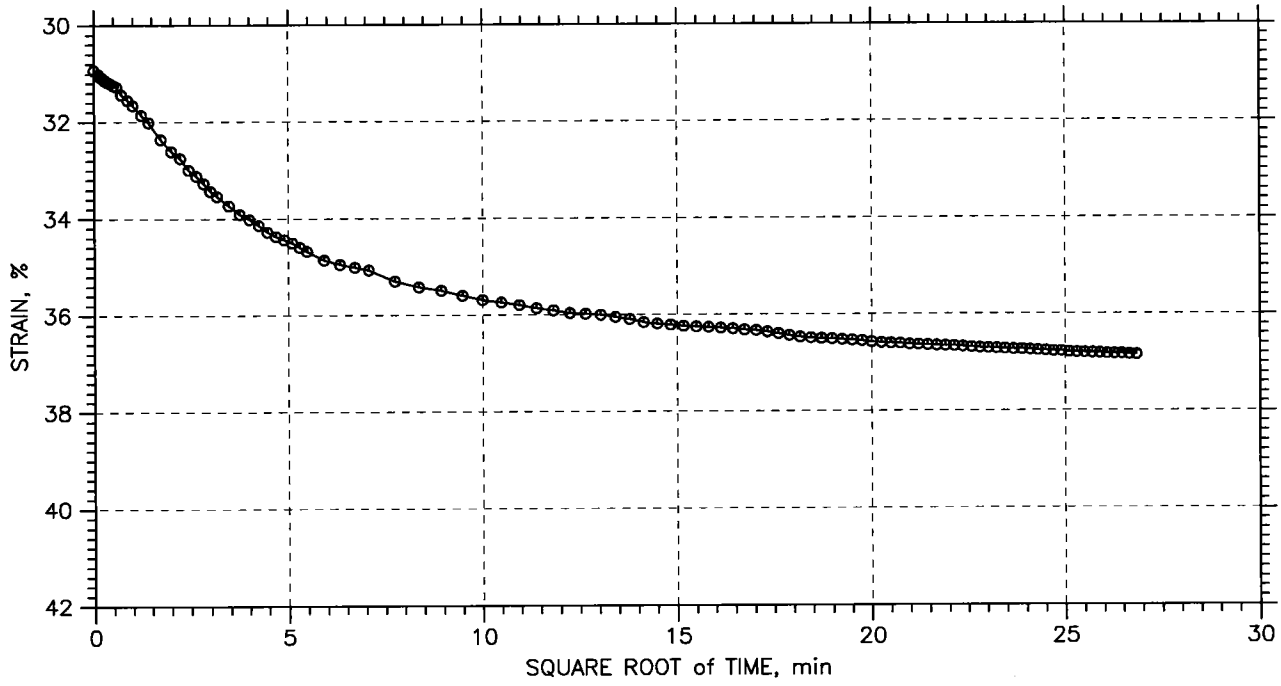
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 1280. psf





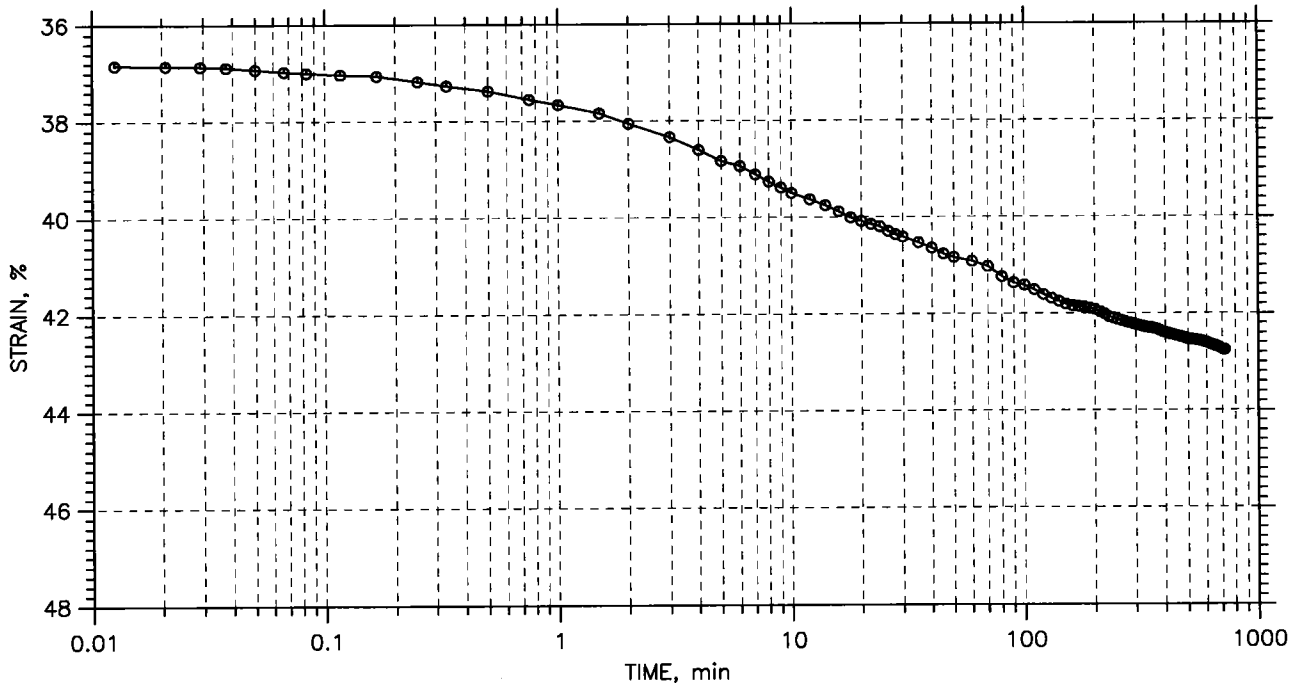
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

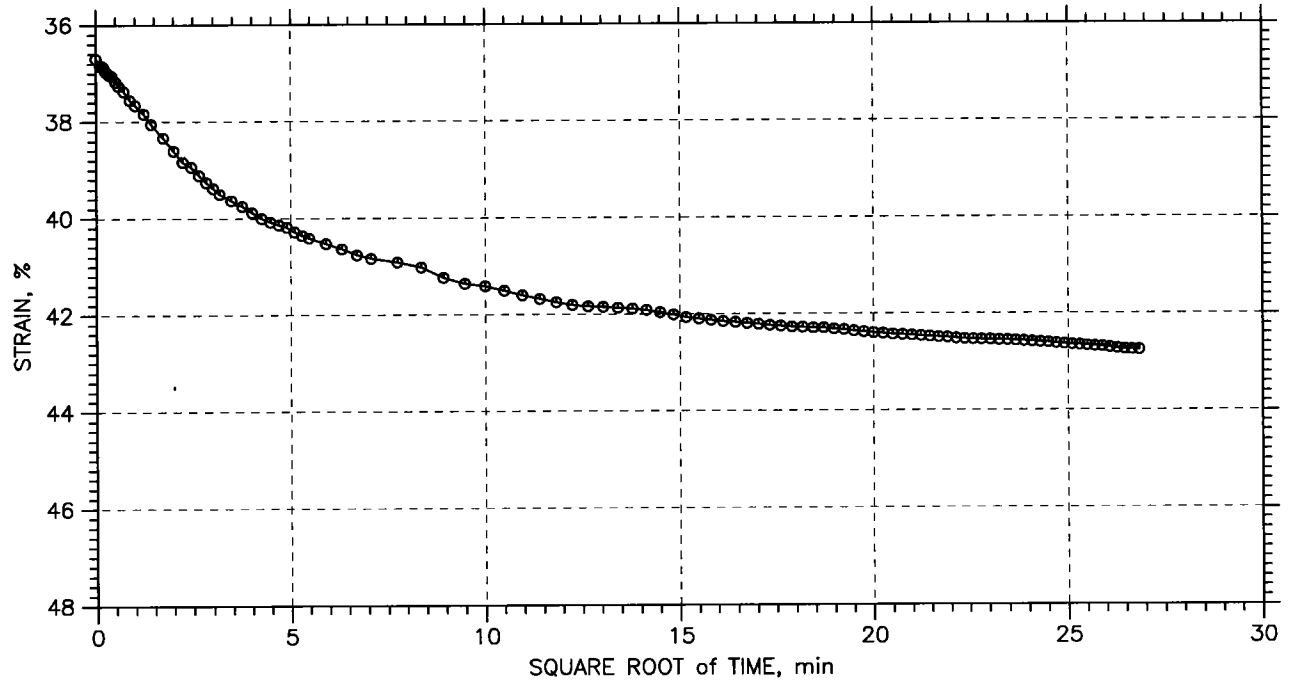
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 2560. psf





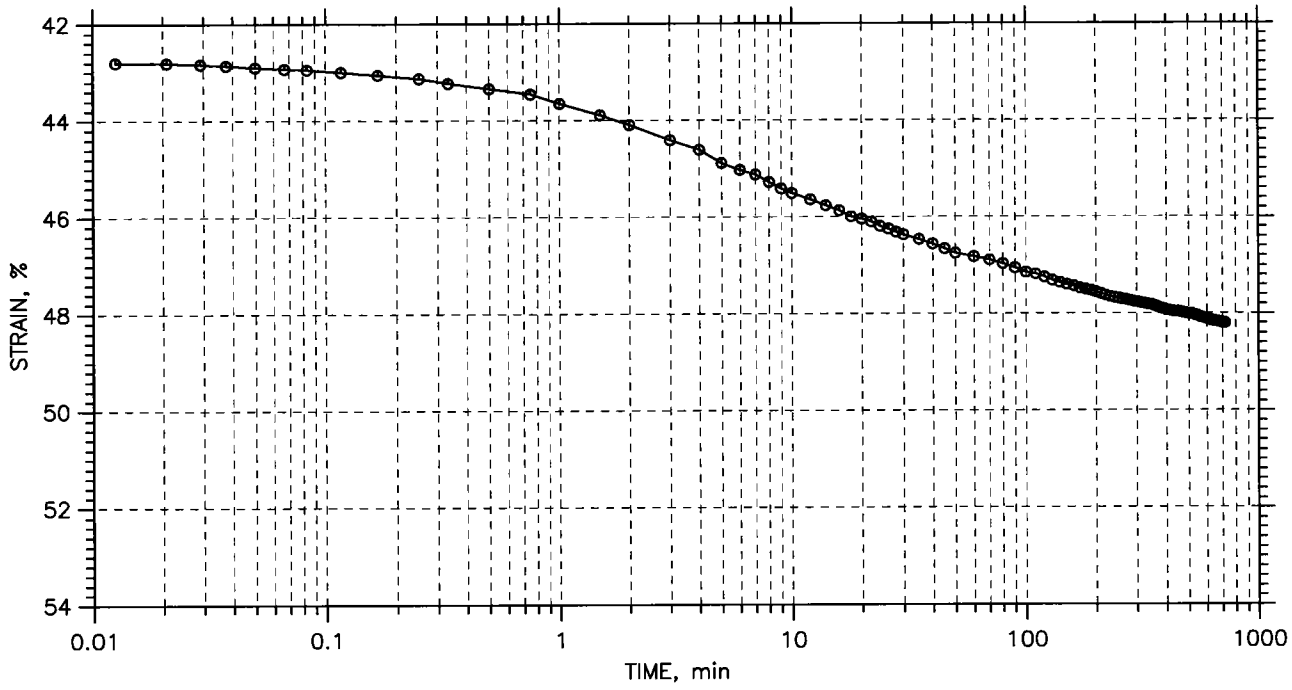
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

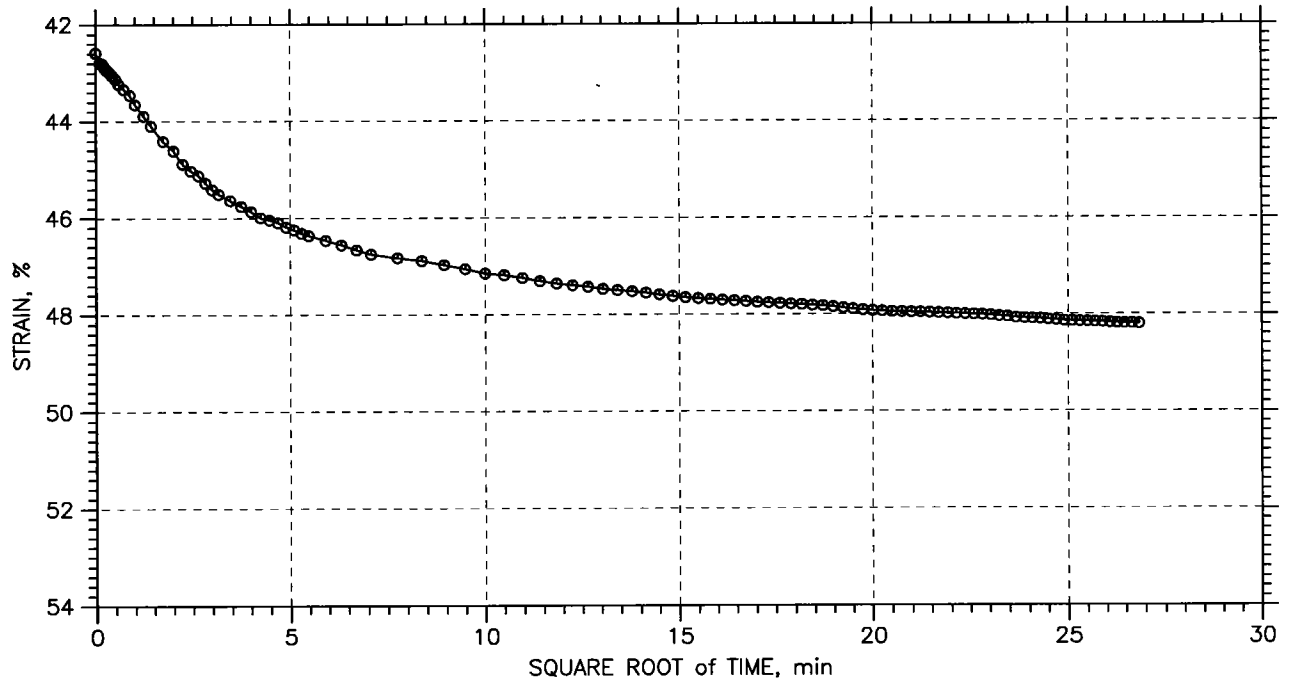
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 5120. psf





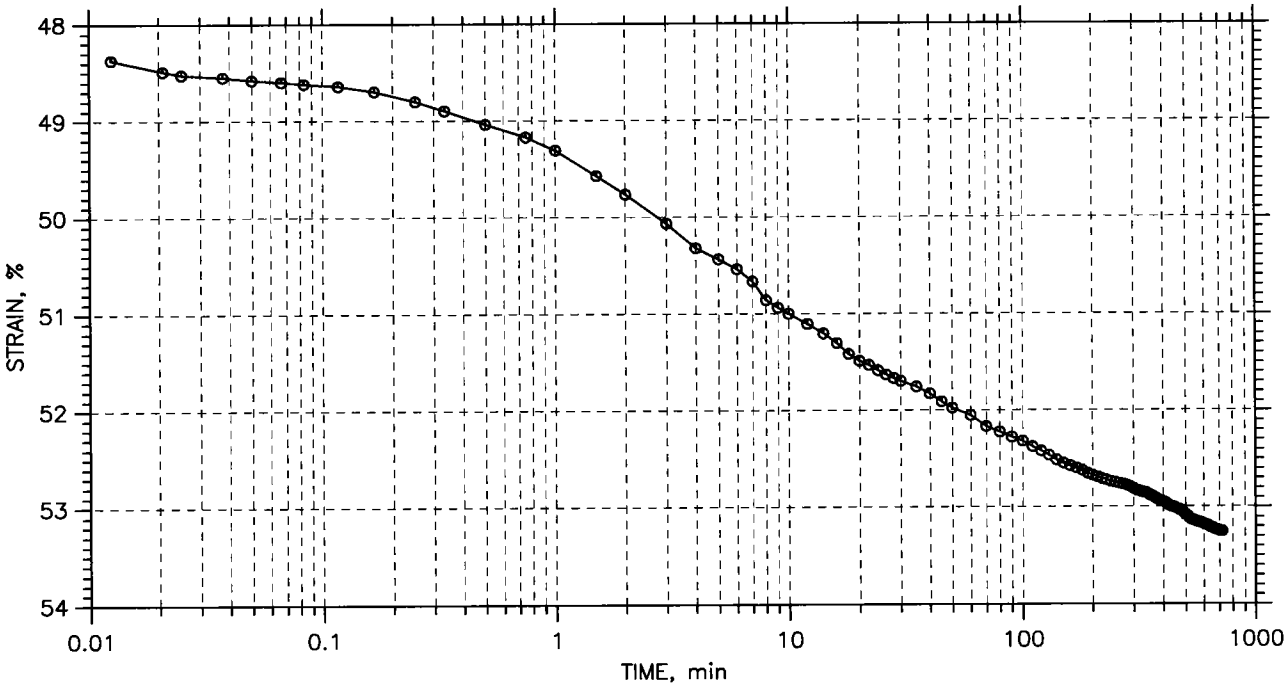
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

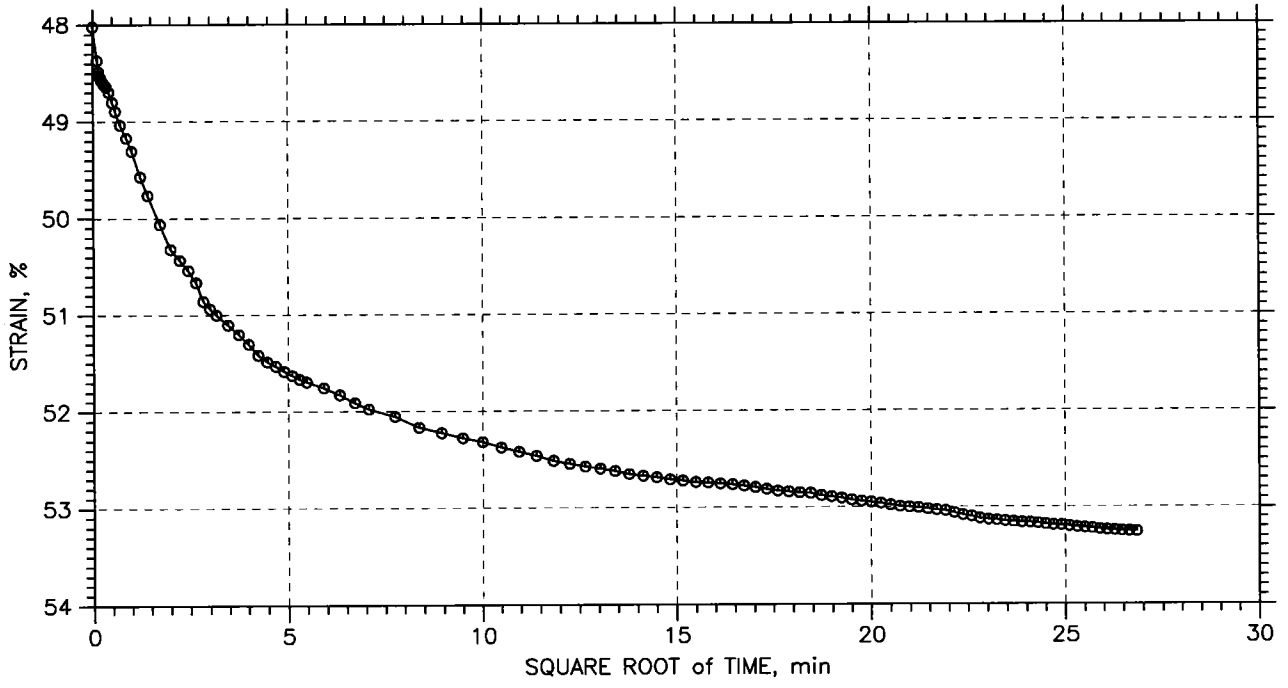
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 10240 psf





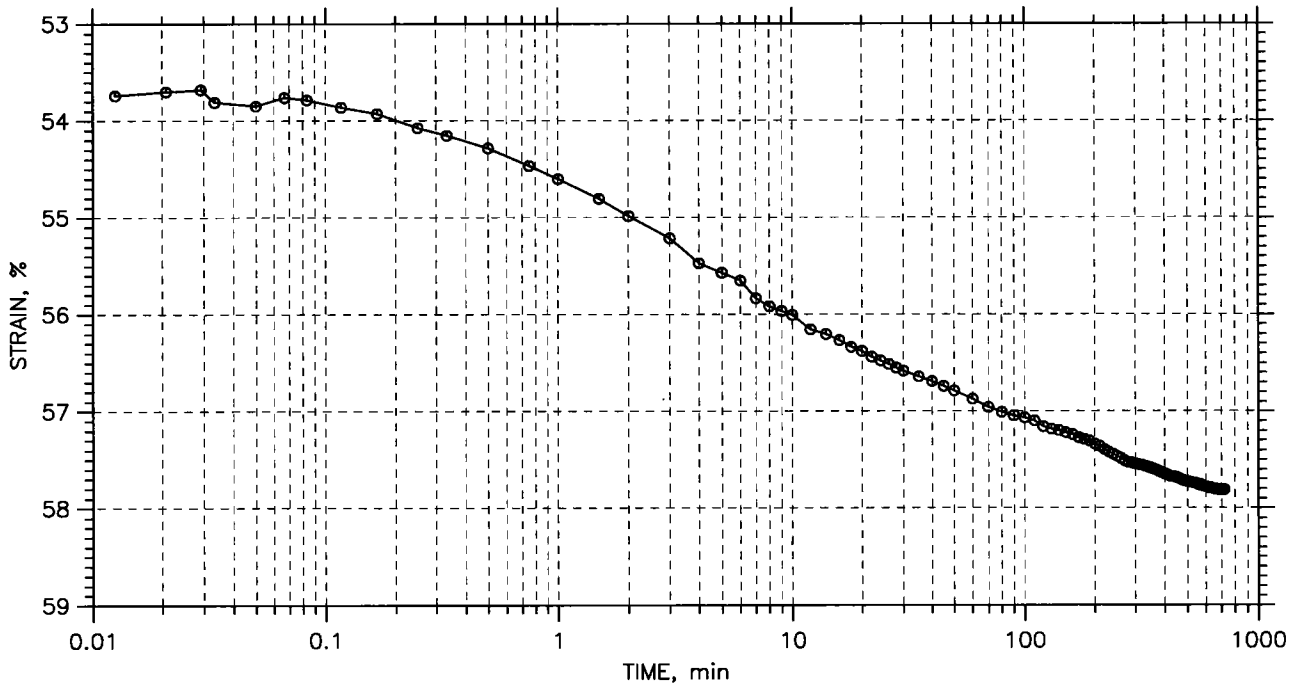
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

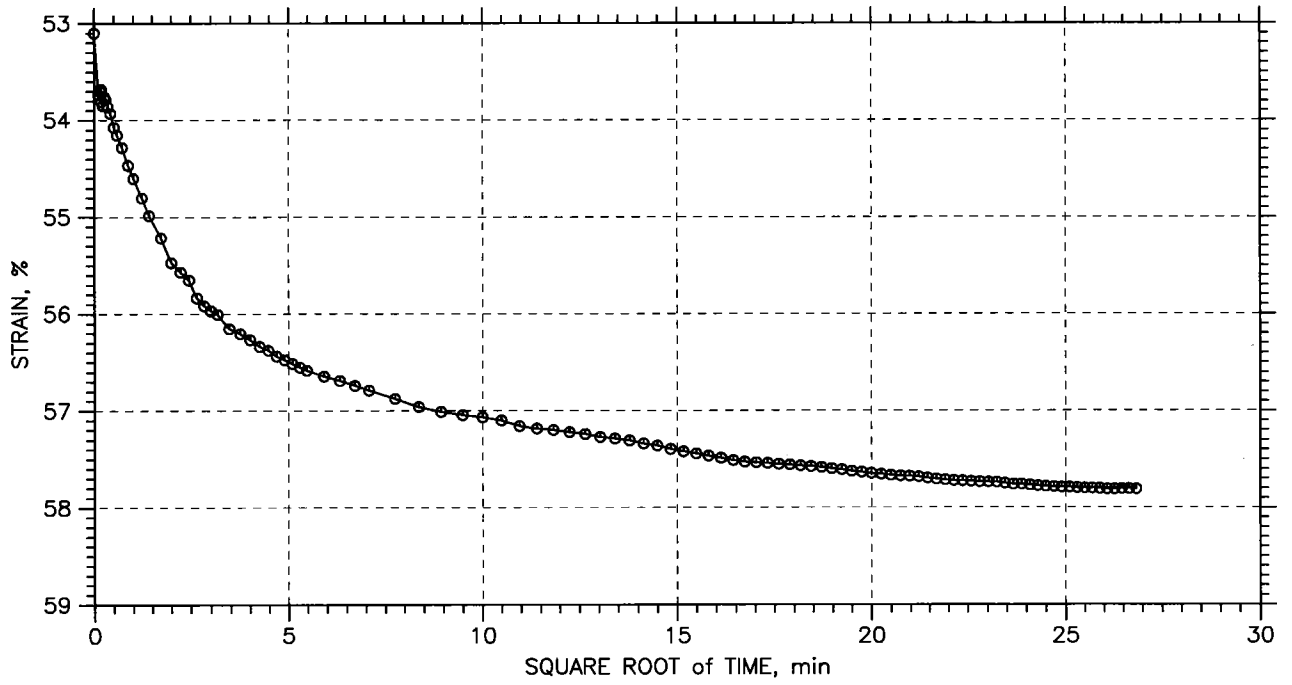
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 20480 psf

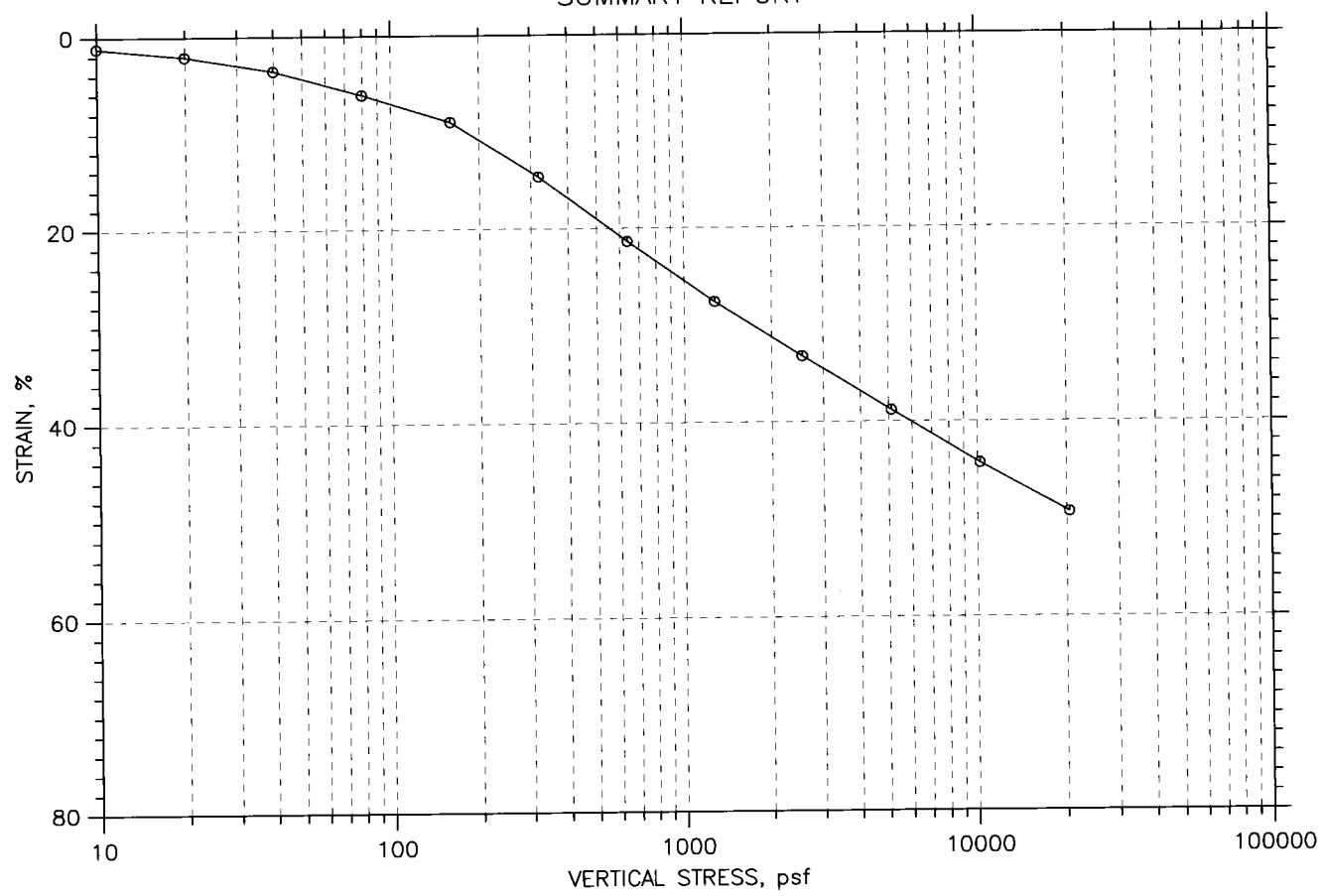


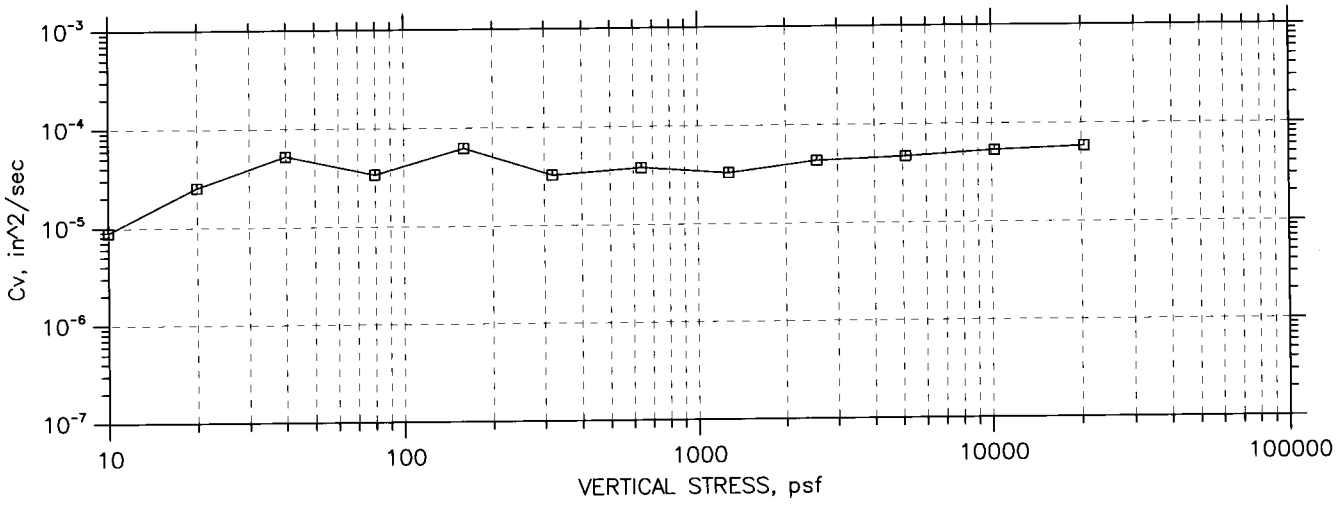


GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 5-04	Test Date: 08/24/09	Depth:
	Test No.: C-6	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT

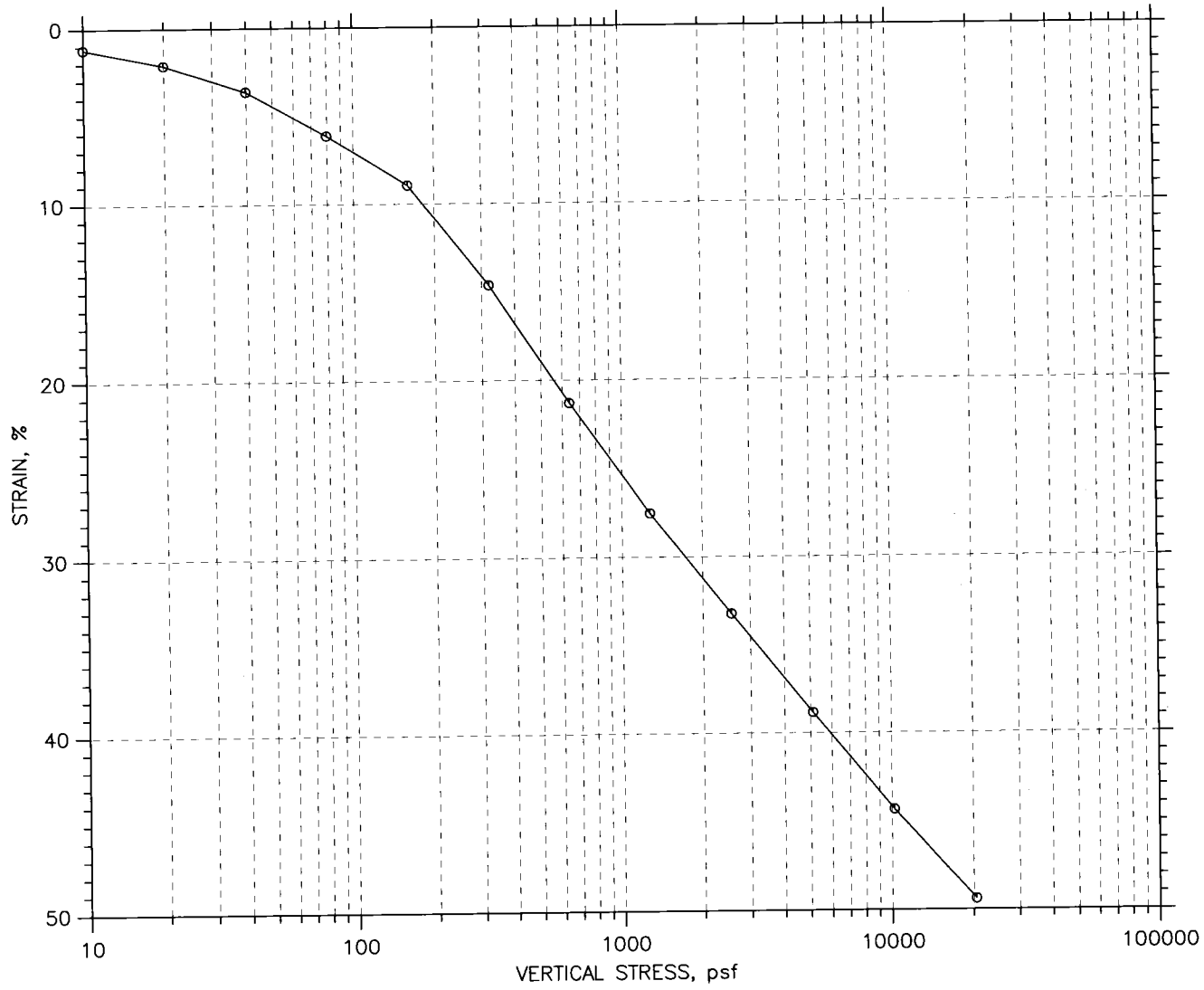




GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT



				Before Test	After Test
Overburden Pressure: ---				Water Content, %	98.59	32.43
Preconsolidation Pressure: ---				Dry Unit Weight, pcf	46.65	92.26
Compression Index: ---				Saturation, %	99.98	100.00
Diameter: 2.5 in		Height: 1 in		Void Ratio	2.80	0.92
LL: ---	PL: ---	PI: ---	GS: 2.84			

GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 8-02
Test No.: C-1

Location: Boston, MA
Tested By: md
Test Date: 08/05/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, gray silt
Remarks: System C

Estimated Specific Gravity: 2.84
Initial Void Ratio: 2.80
Final Void Ratio: 0.92

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.00 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	4294	RING		3219
Wt. Container + Wet Soil, gm	300.88	334.65	294.89	89.36
Wt. Container + Dry Soil, gm	158.39	275.4	275.4	69.51
Wt. Container, gm	8.28	215.29	215.29	8.31
Wt. Dry Soil, gm	150.11	60.105	60.105	61.2
Water Content, %	94.92	98.59	32.43	32.43
Void Ratio	---	2.80	0.92	---
Degree of Saturation, %	---	99.98	100.00	---
Dry Unit Weight, pcf	---	46.647	92.26	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 8-02
Test No.: C-1

Location: Boston, MA
Tested By: md
Test Date: 08/05/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, gray silt
Remarks: System C

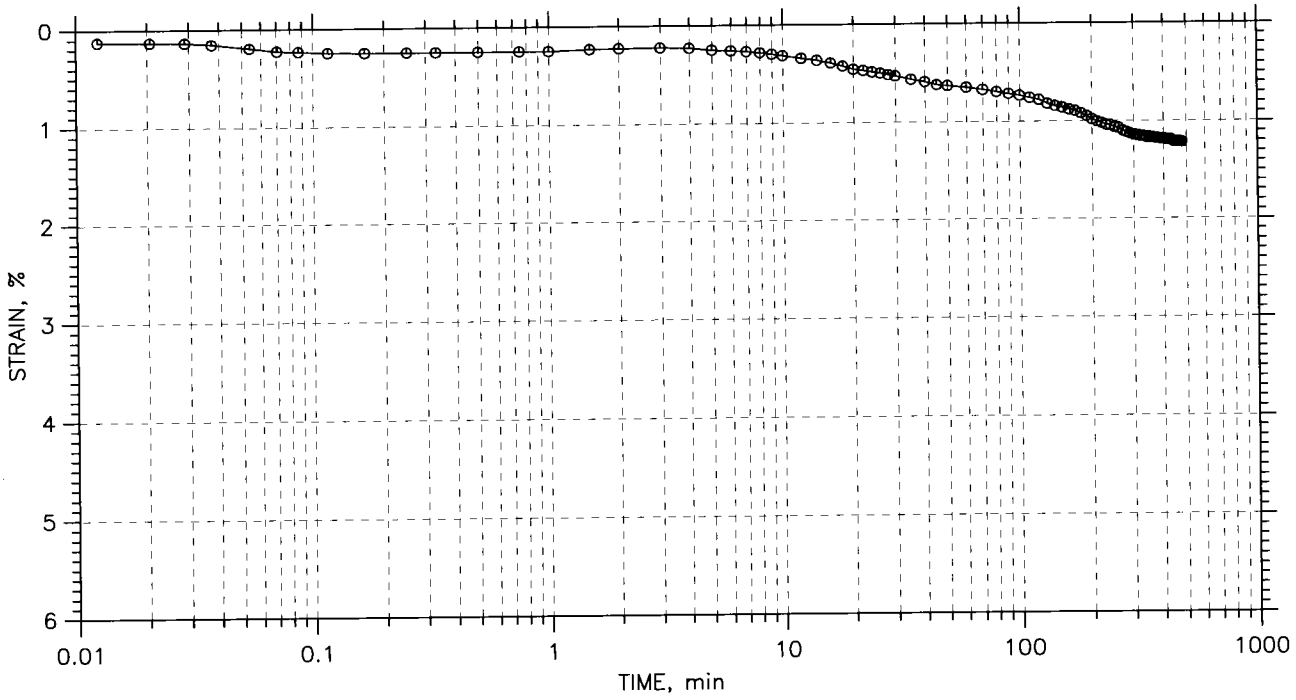
	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	10	0.01223	2.752	1.22	94.1	0.0	8.63e-006	0.00e+000	8.63e-006
2	20	0.02126	2.718	2.13	32.3	0.0	2.46e-005	0.00e+000	2.46e-005
3	40	0.03621	2.661	3.62	15.3	0.0	5.07e-005	0.00e+000	5.07e-005
4	80	0.06137	2.566	6.14	22.2	23.1	3.35e-005	3.21e-005	3.28e-005
5	160	0.0895	2.459	8.95	11.7	0.0	6.02e-005	0.00e+000	6.02e-005
6	320	0.1463	2.243	14.63	23.0	17.6	2.78e-005	3.64e-005	3.15e-005
7	640	0.2134	1.988	21.34	15.6	14.6	3.55e-005	3.80e-005	3.67e-005
8	1.28e+003	0.2762	1.750	27.62	17.1	12.1	2.74e-005	3.87e-005	3.21e-005
9	2.56e+003	0.333	1.534	33.30	10.5	8.5	3.79e-005	4.68e-005	4.19e-005
10	5.12e+003	0.3888	1.322	38.88	8.2	6.6	4.09e-005	5.12e-005	4.55e-005
11	1.02e+004	0.4437	1.113	44.37	5.8	4.9	4.79e-005	5.66e-005	5.19e-005
12	2.05e+004	0.4944	0.921	49.44	4.5	3.7	5.19e-005	6.25e-005	5.67e-005

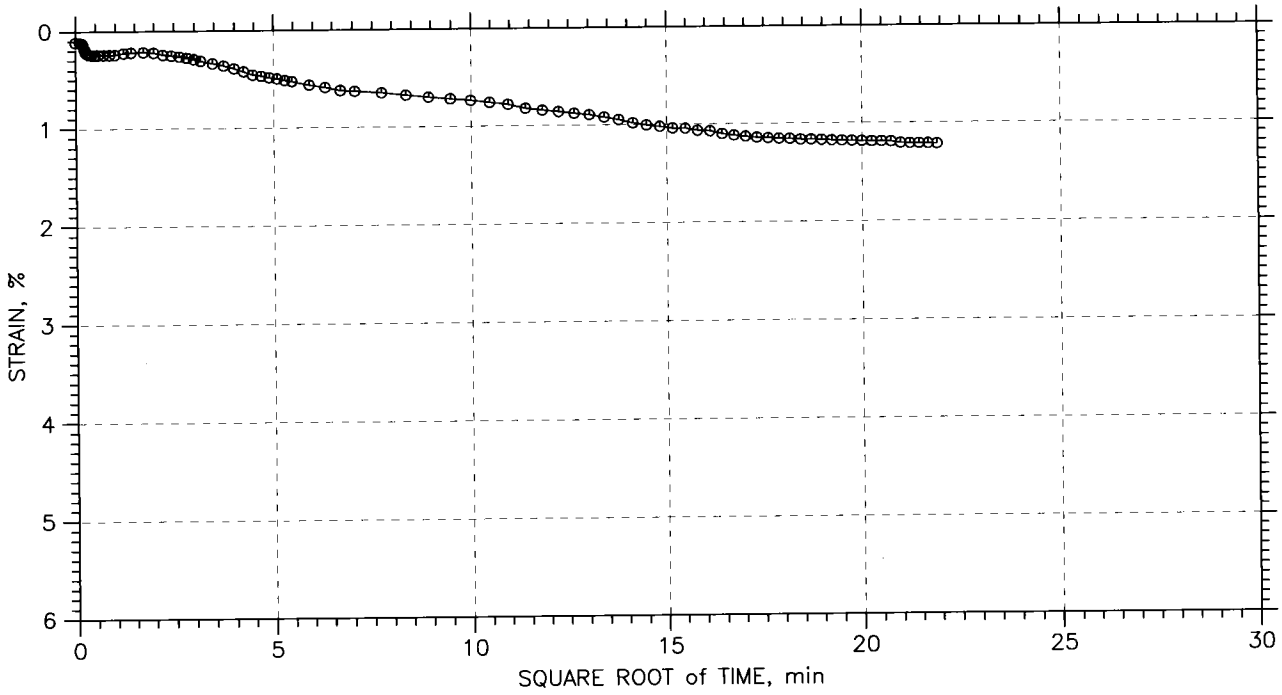
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 10. psf





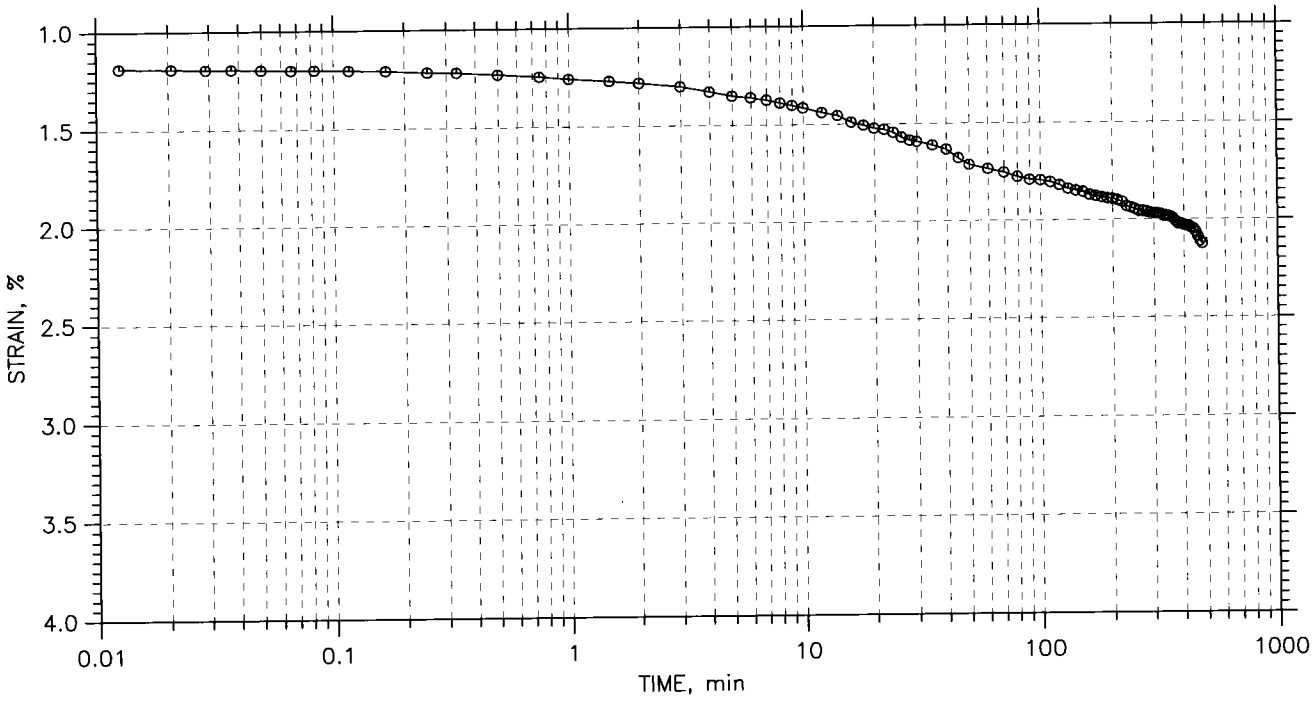
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

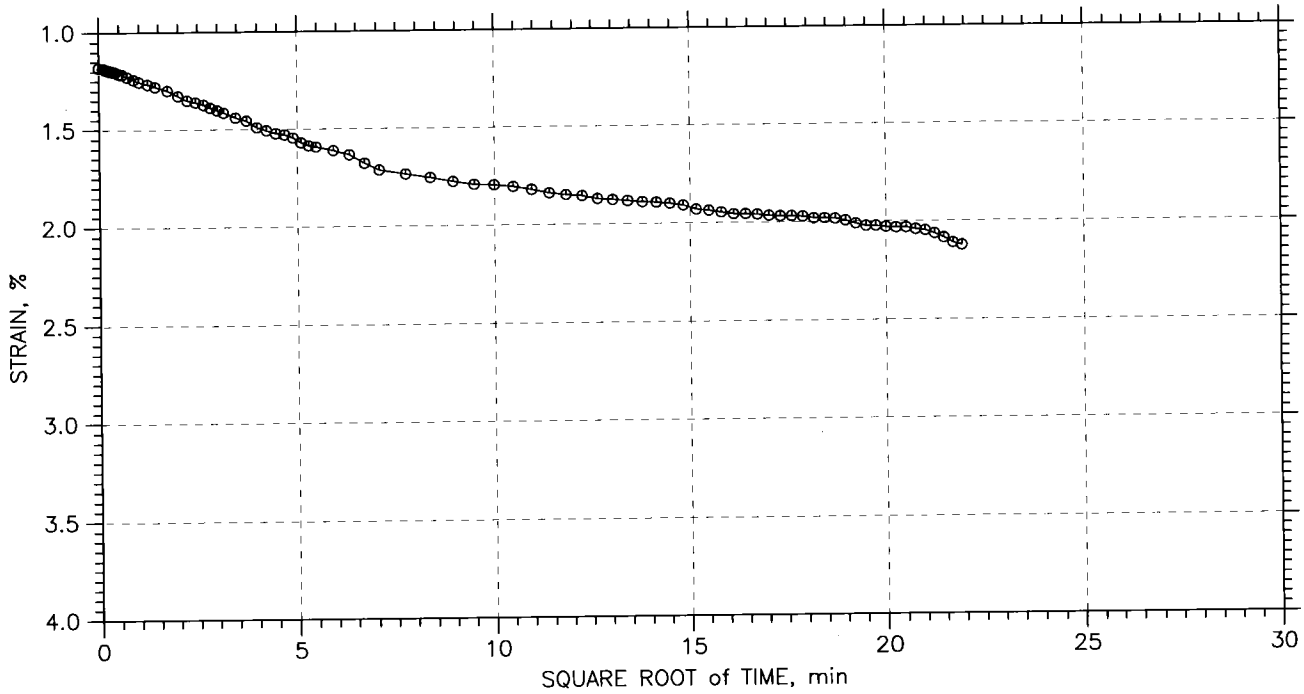
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 20. psf





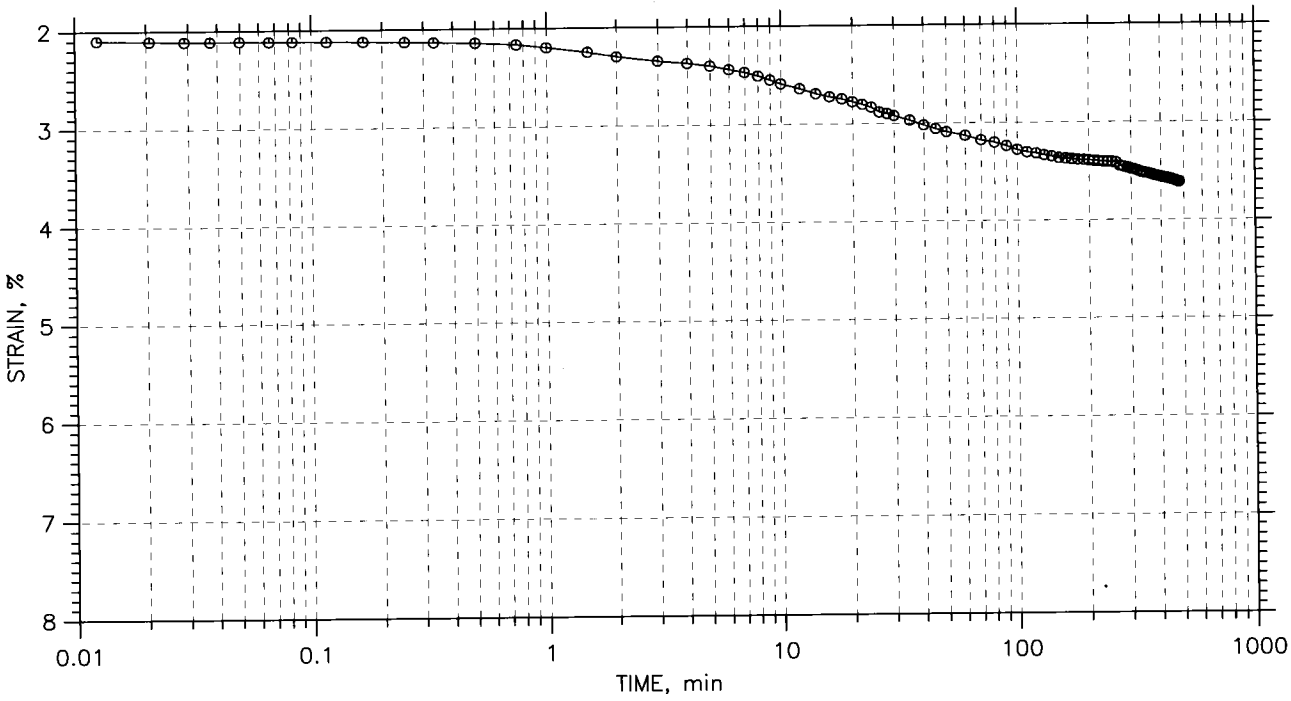
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

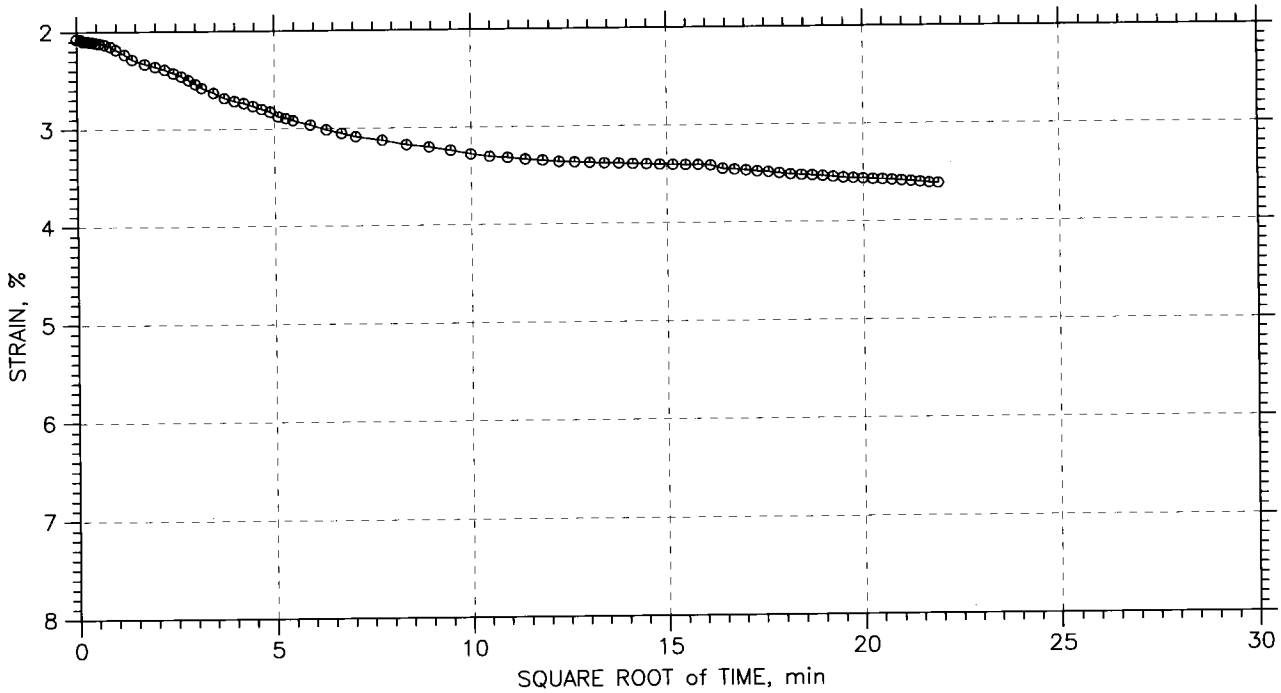
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 40. psf





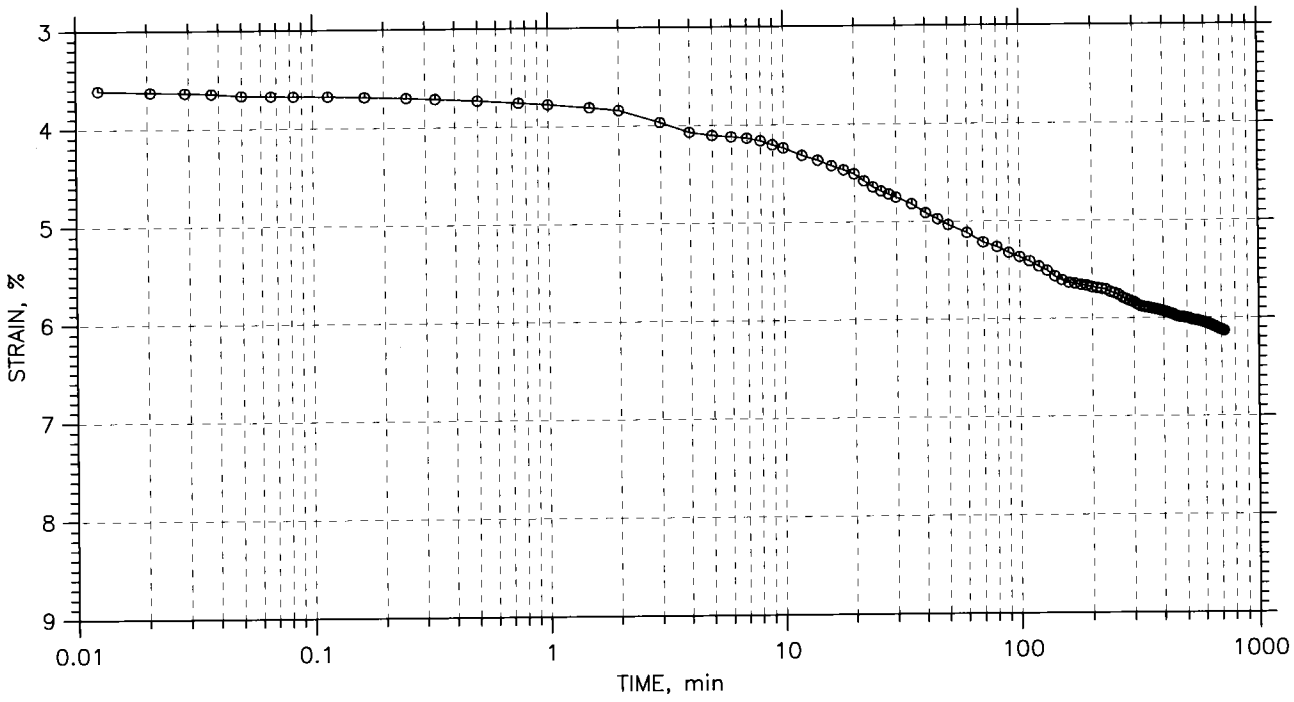
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

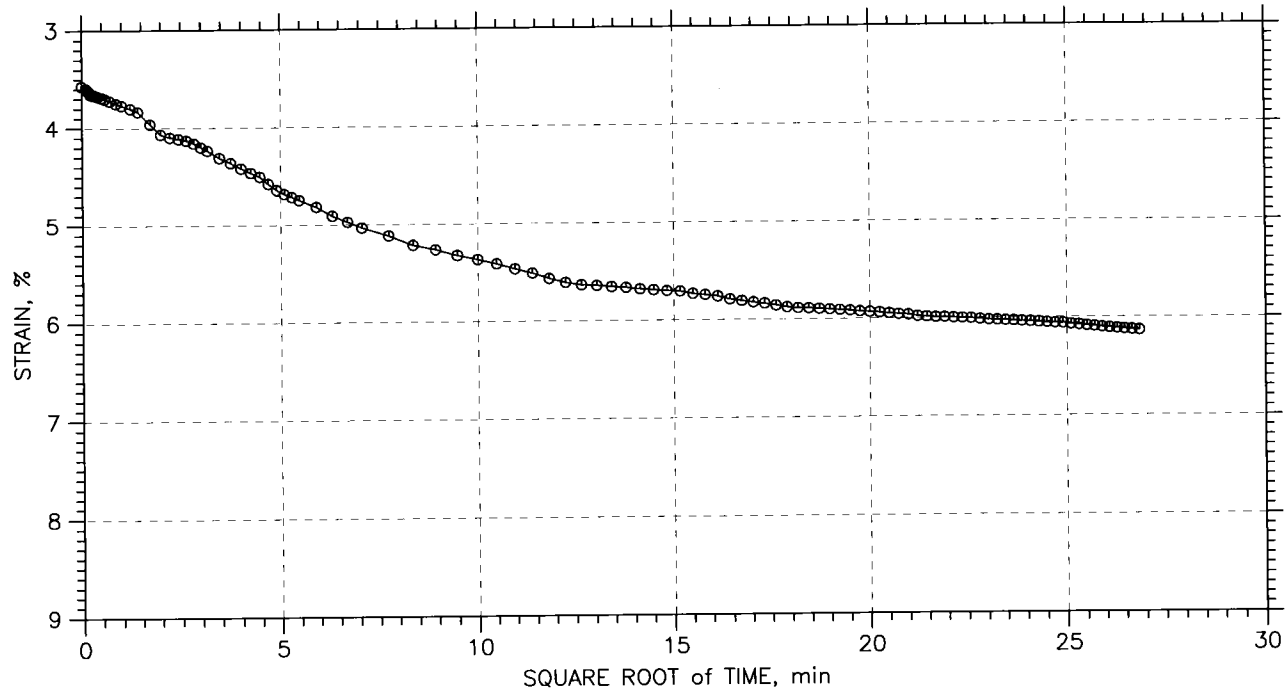
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 80. psf





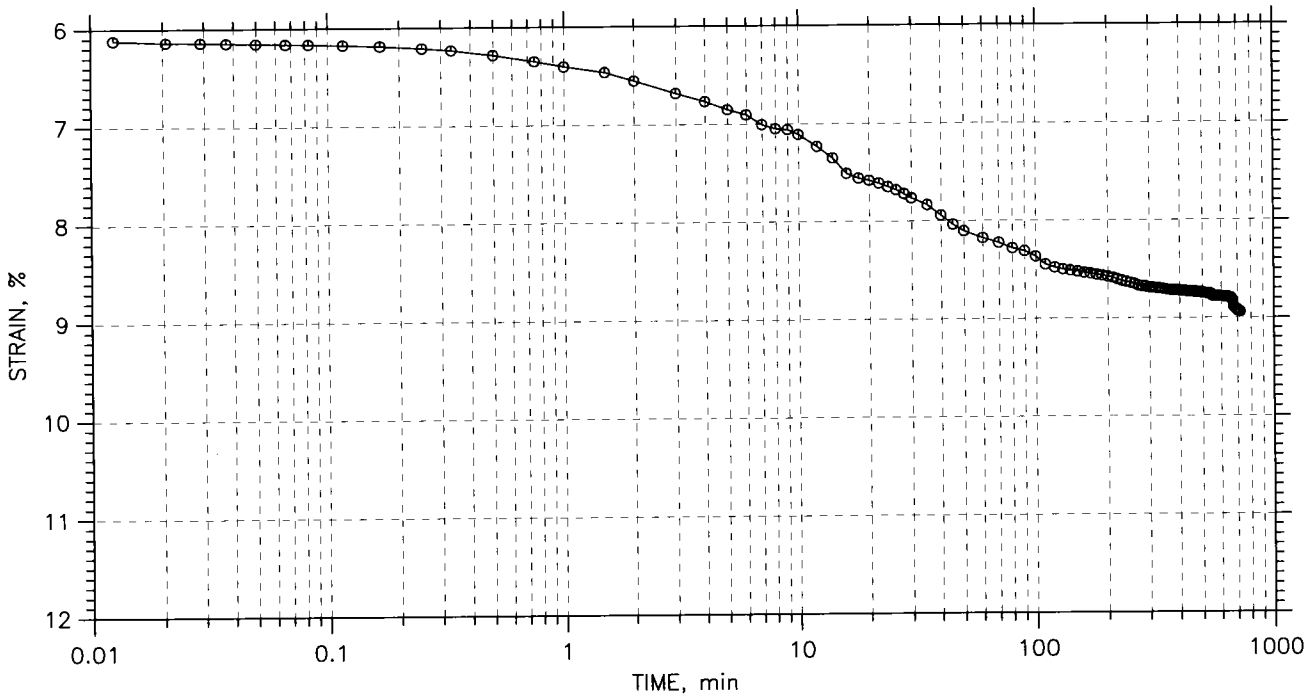
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

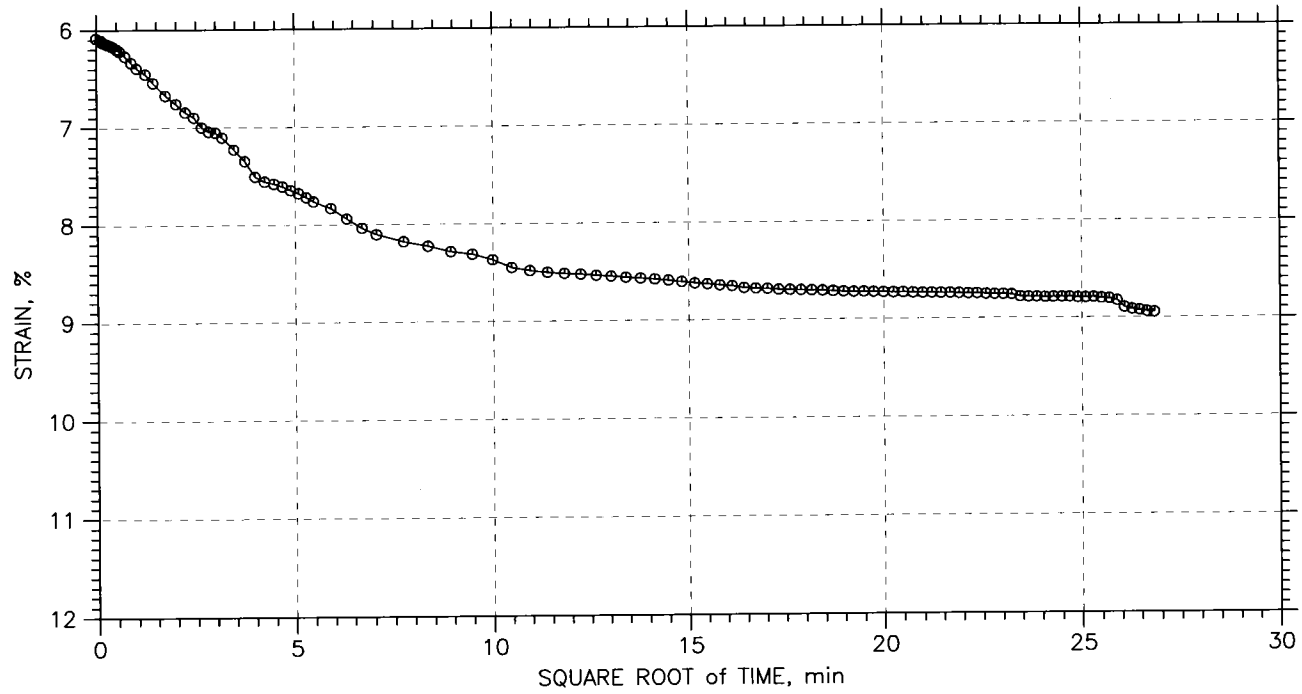
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 160. psf





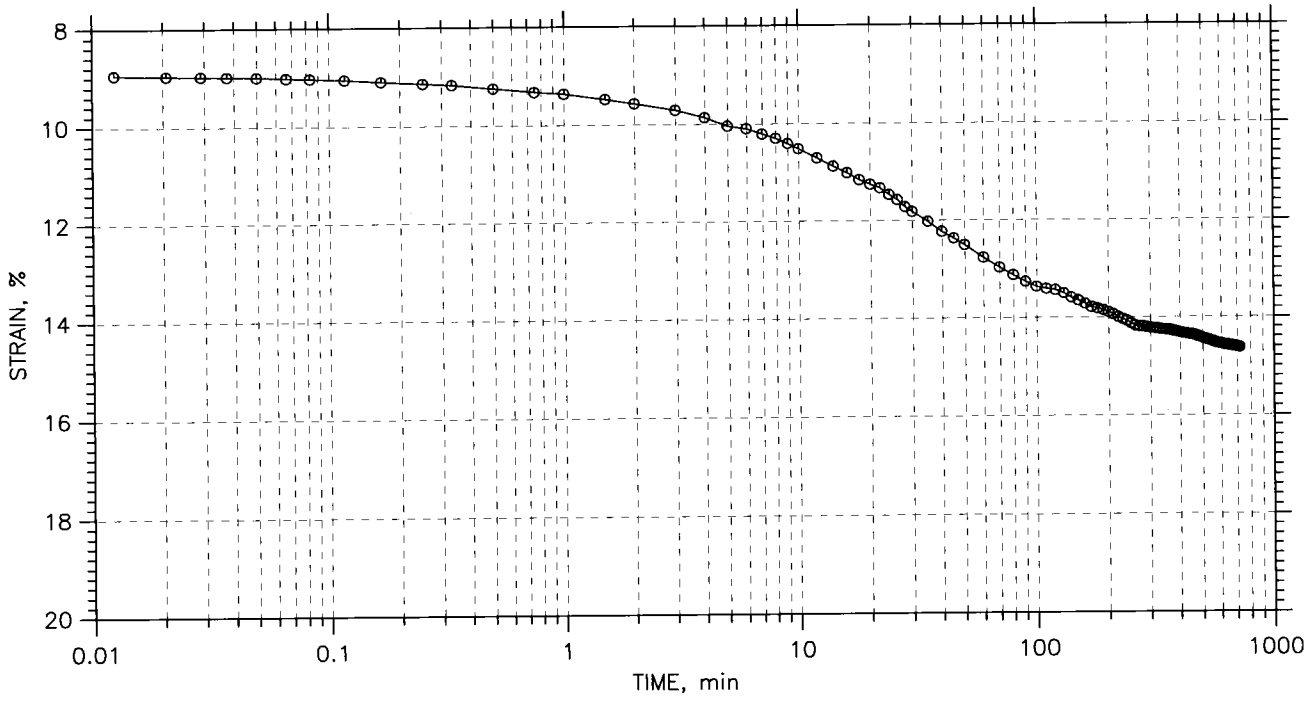
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

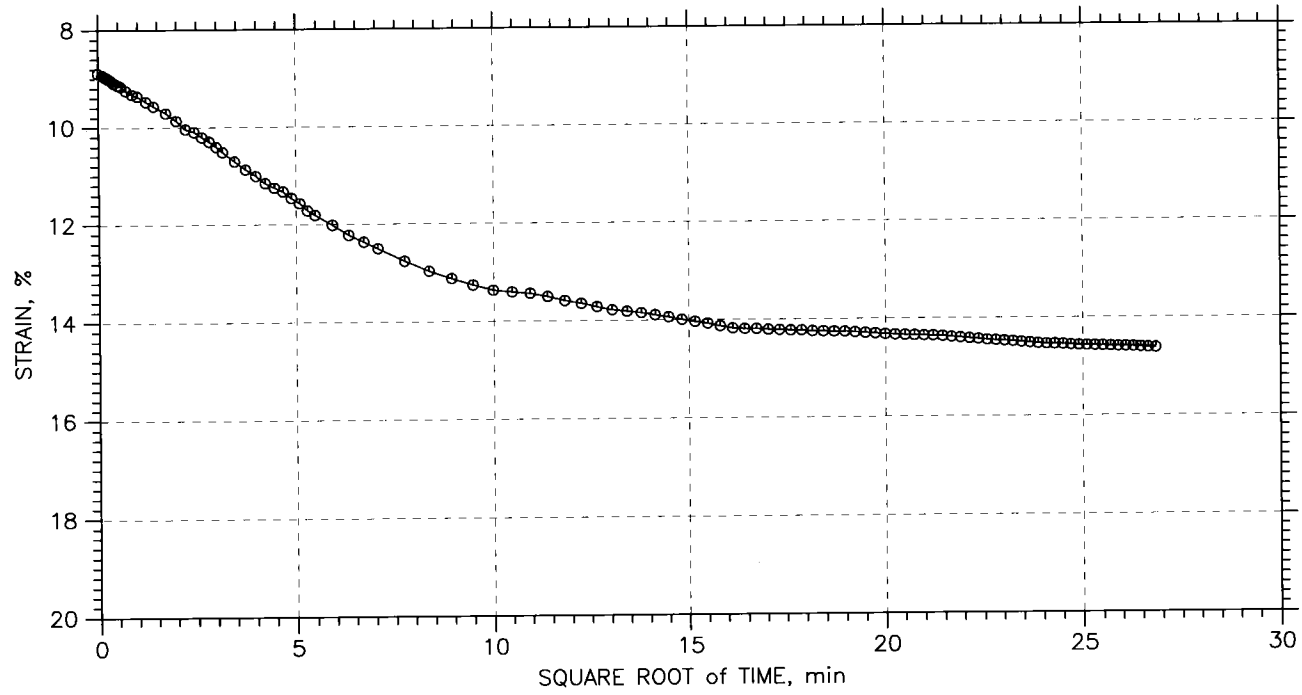
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 320. psf





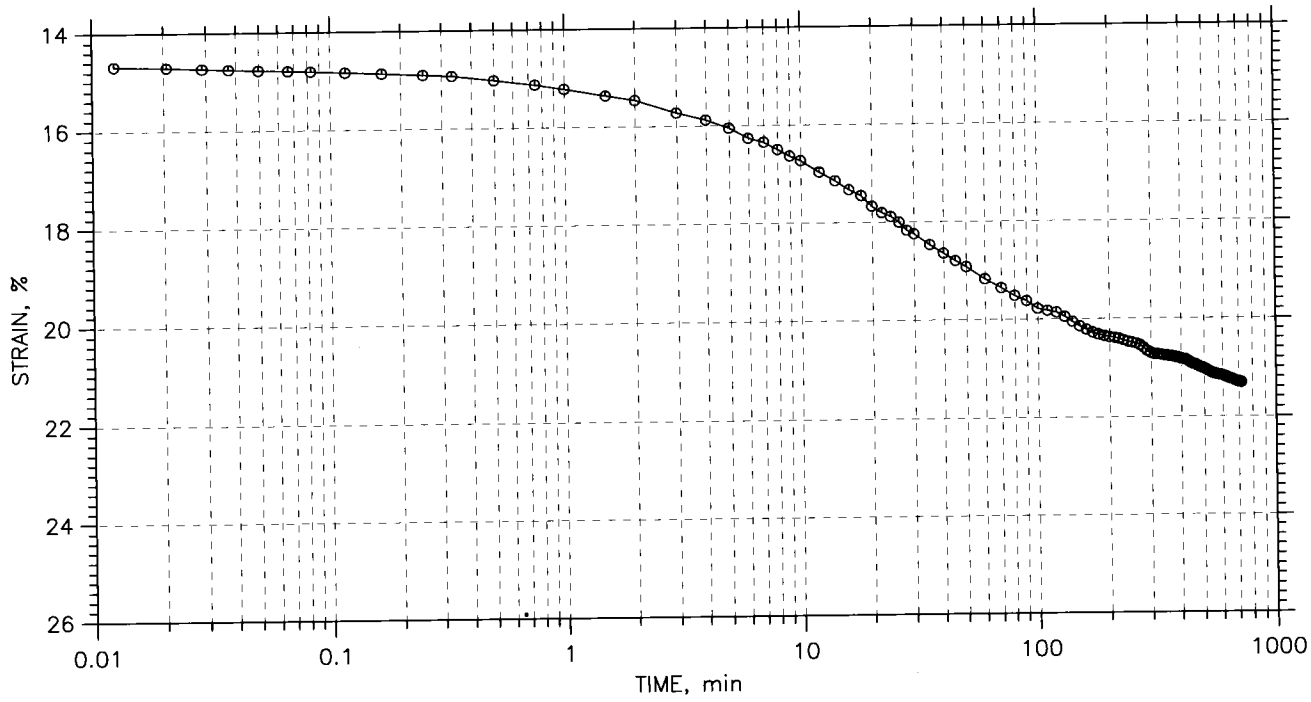
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

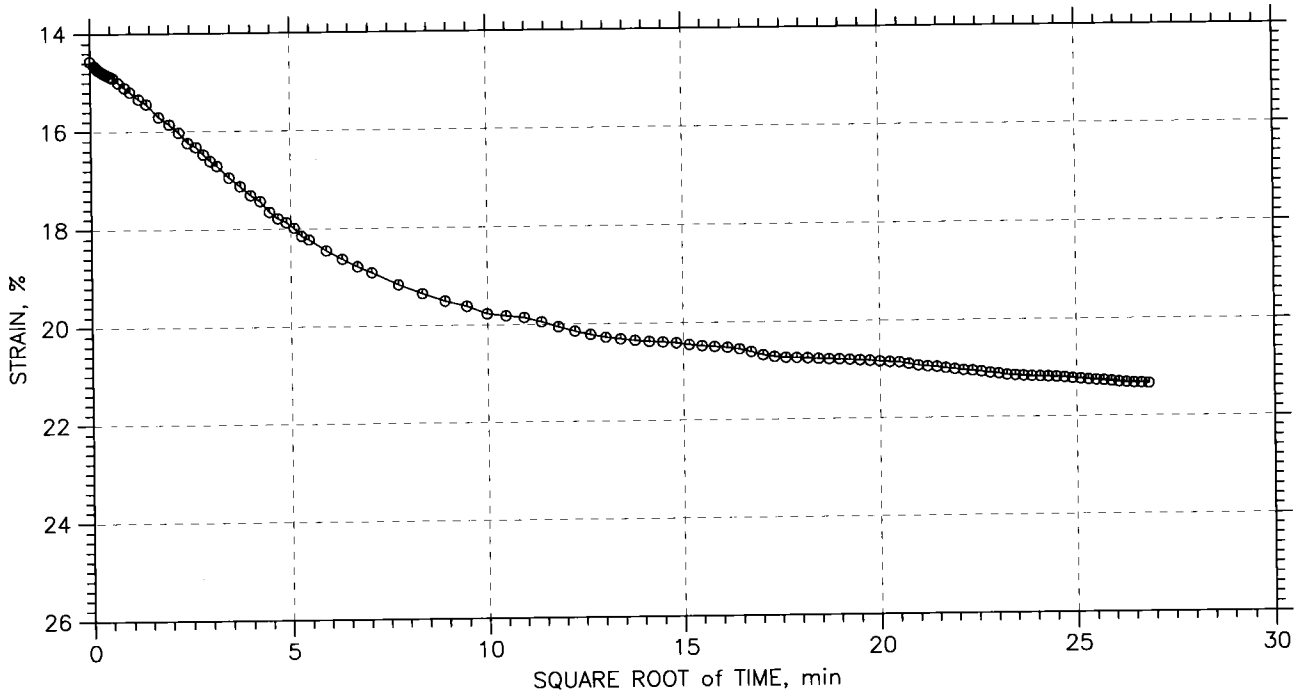
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 640. psf





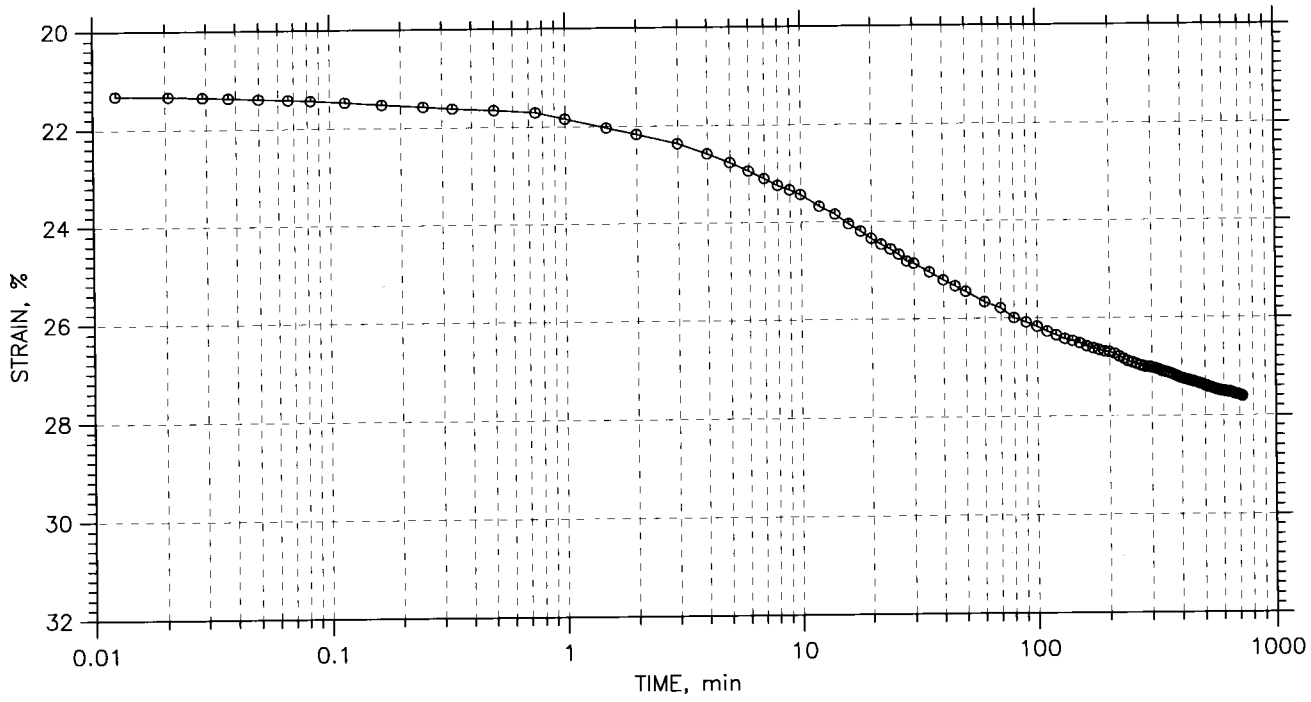
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

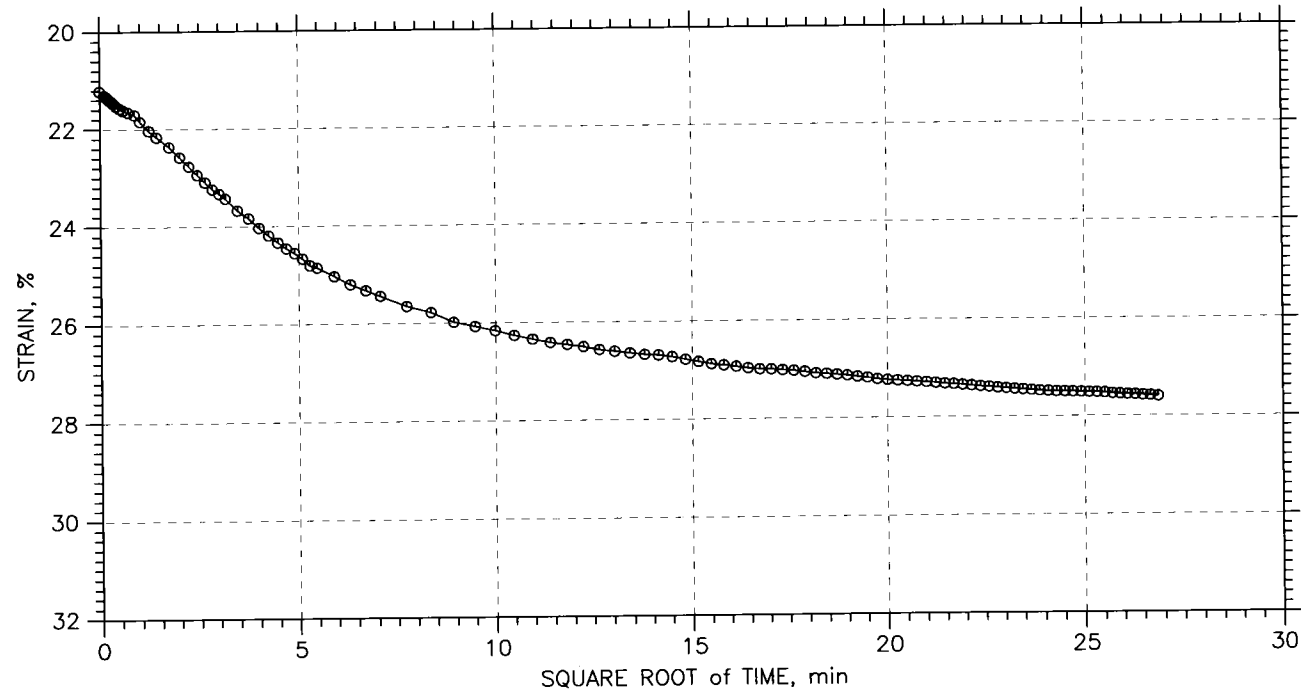
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 1280. psf





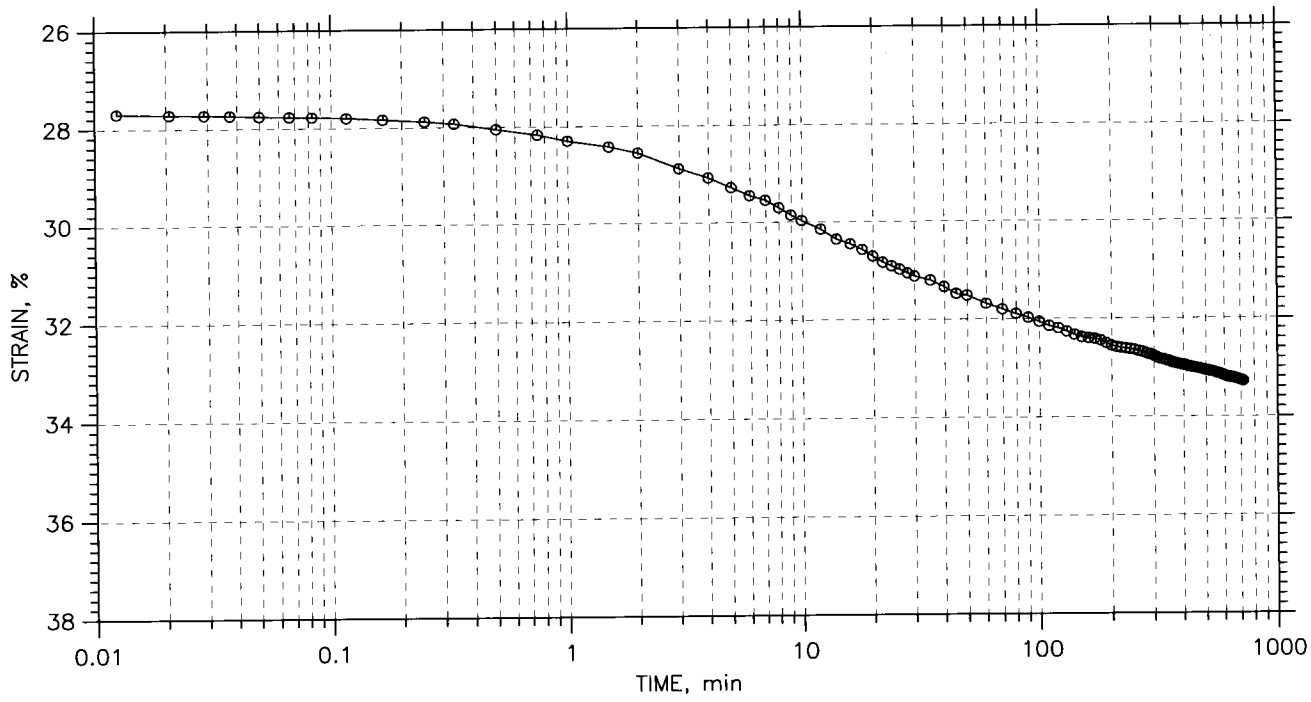
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

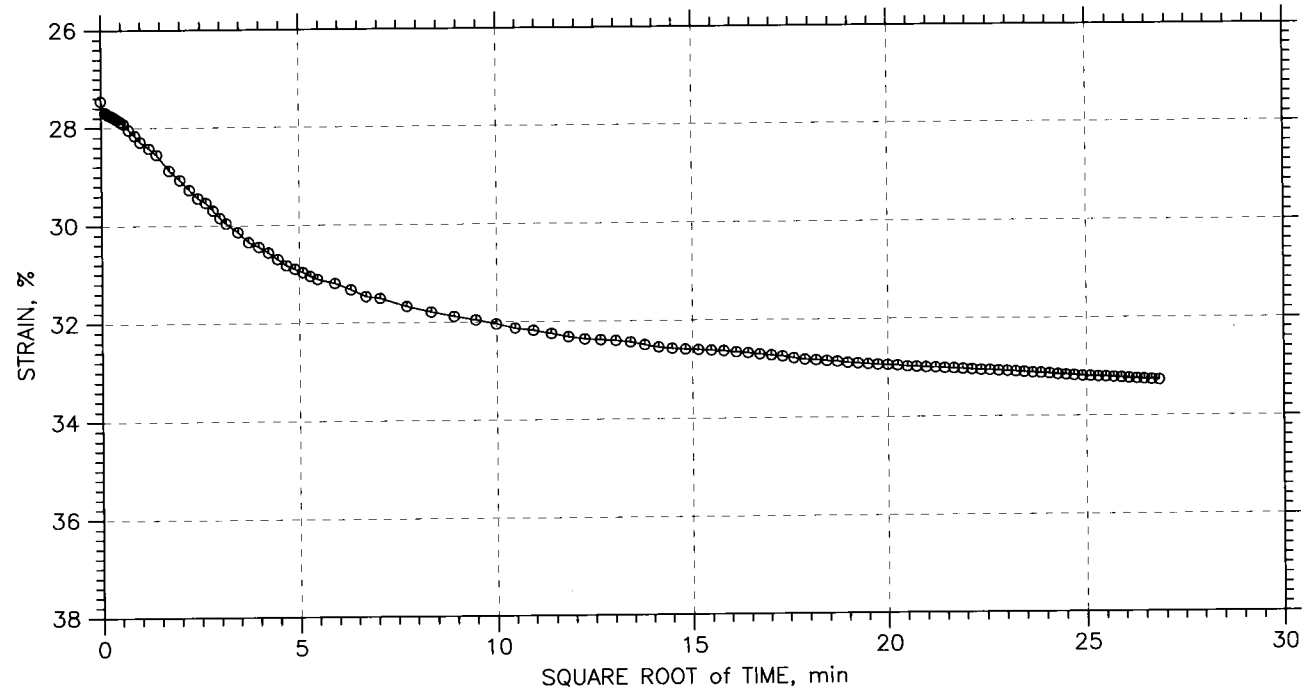
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 2560. psf





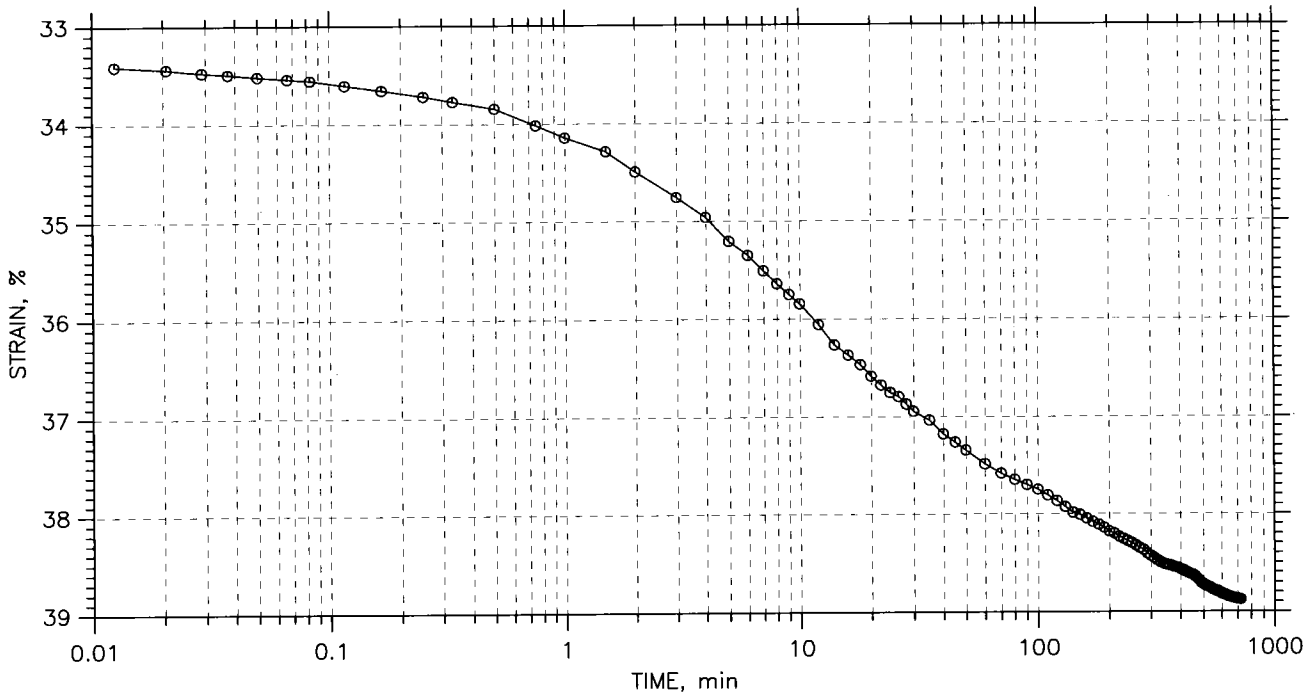
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

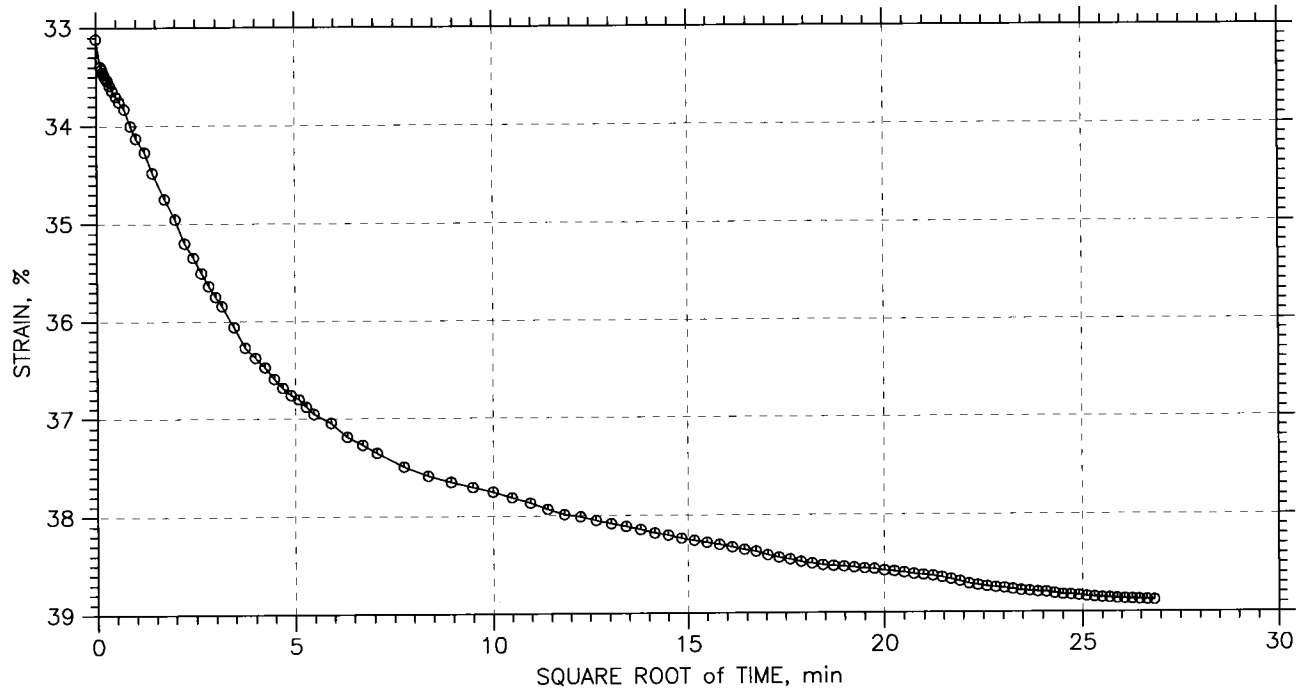
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 5120. psf





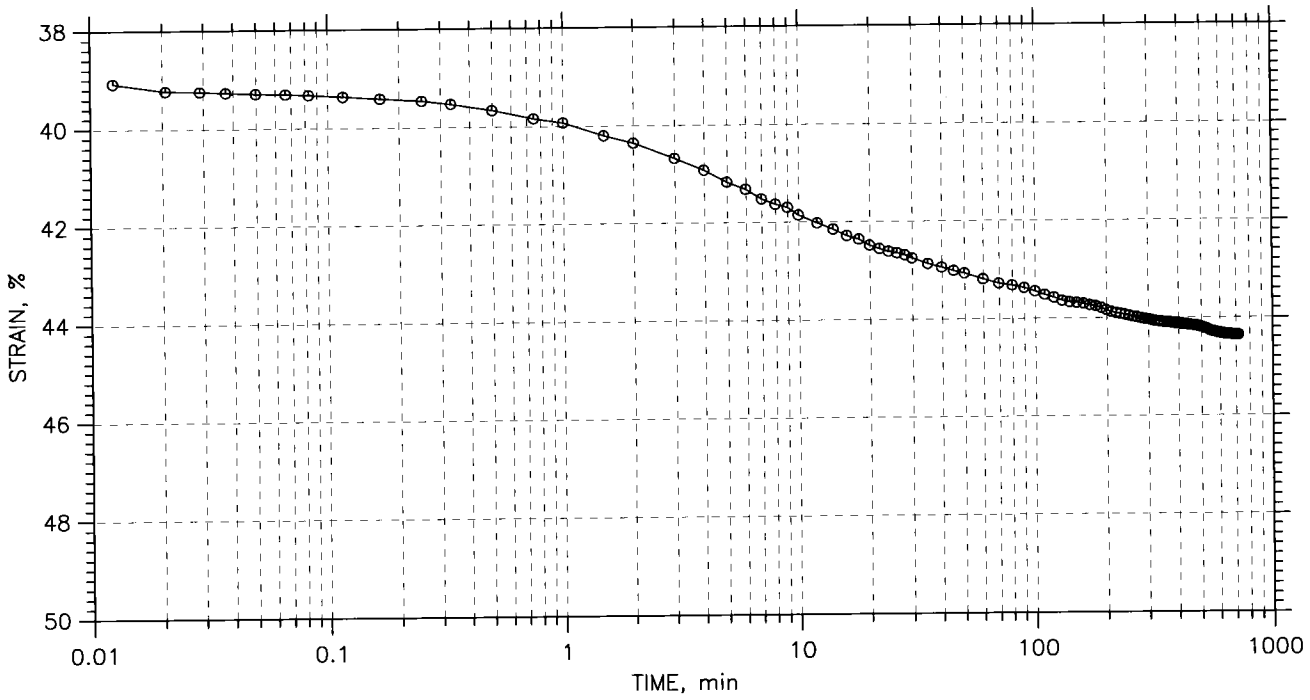
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

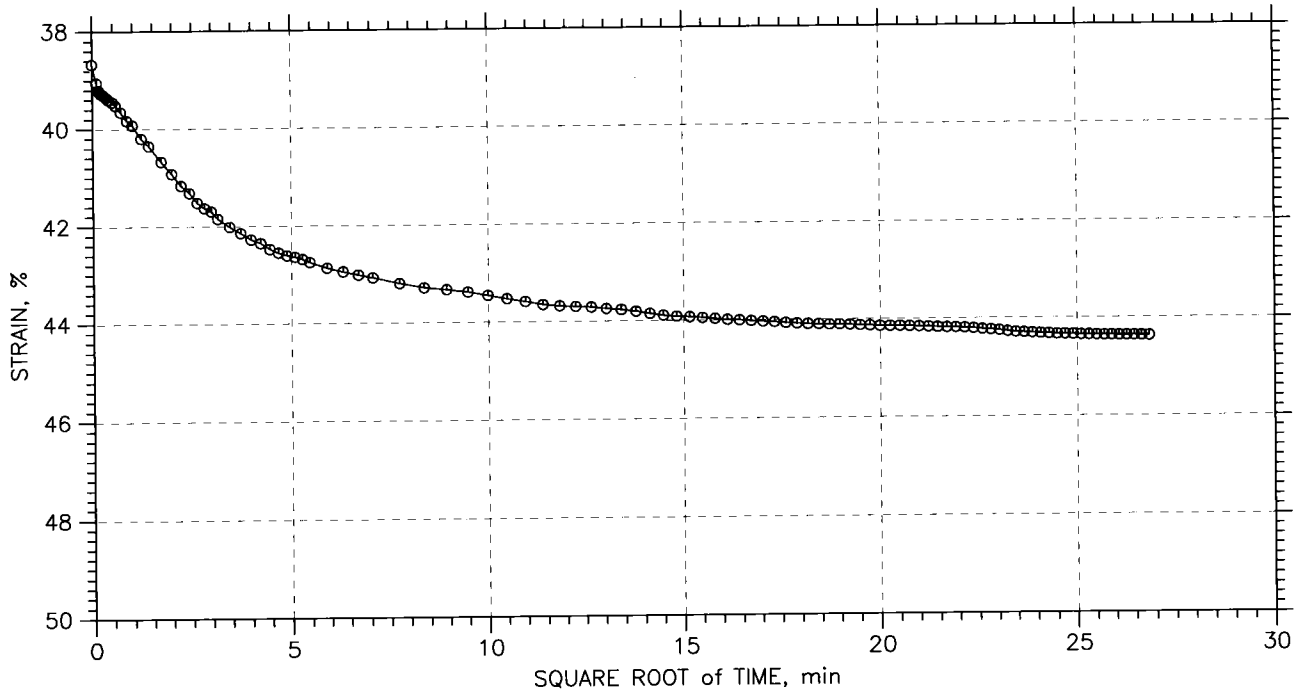
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 10240 psf





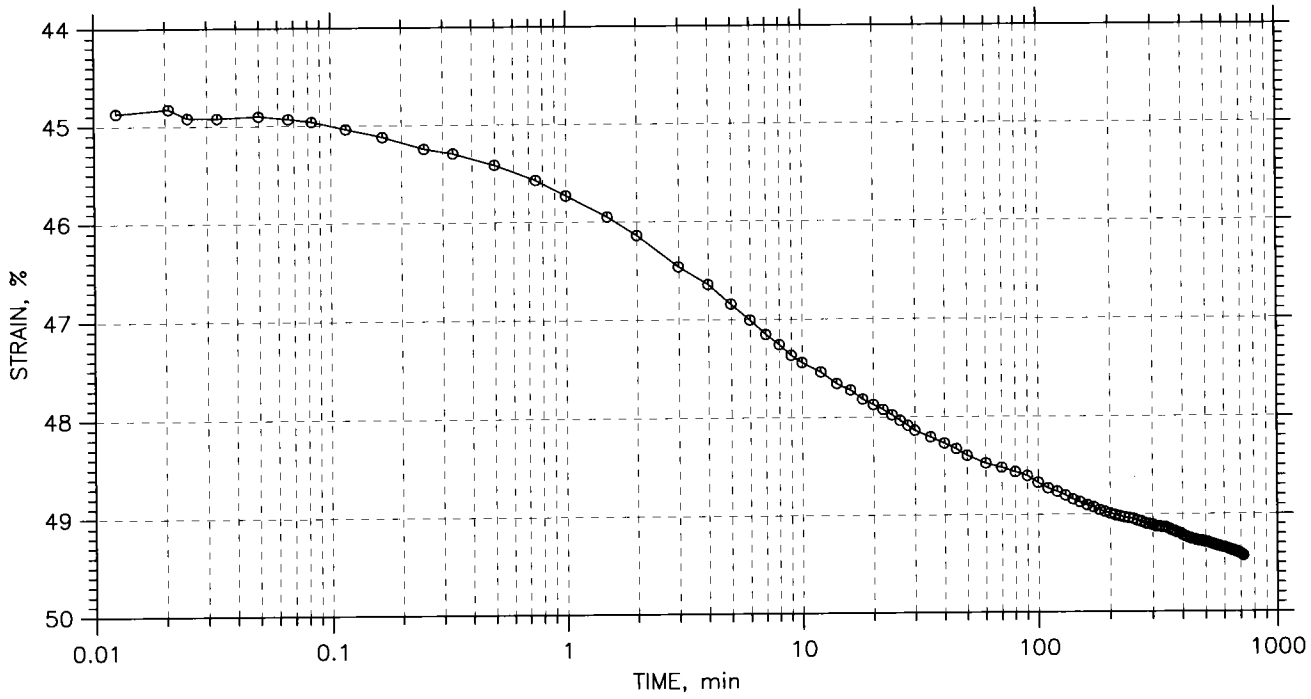
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

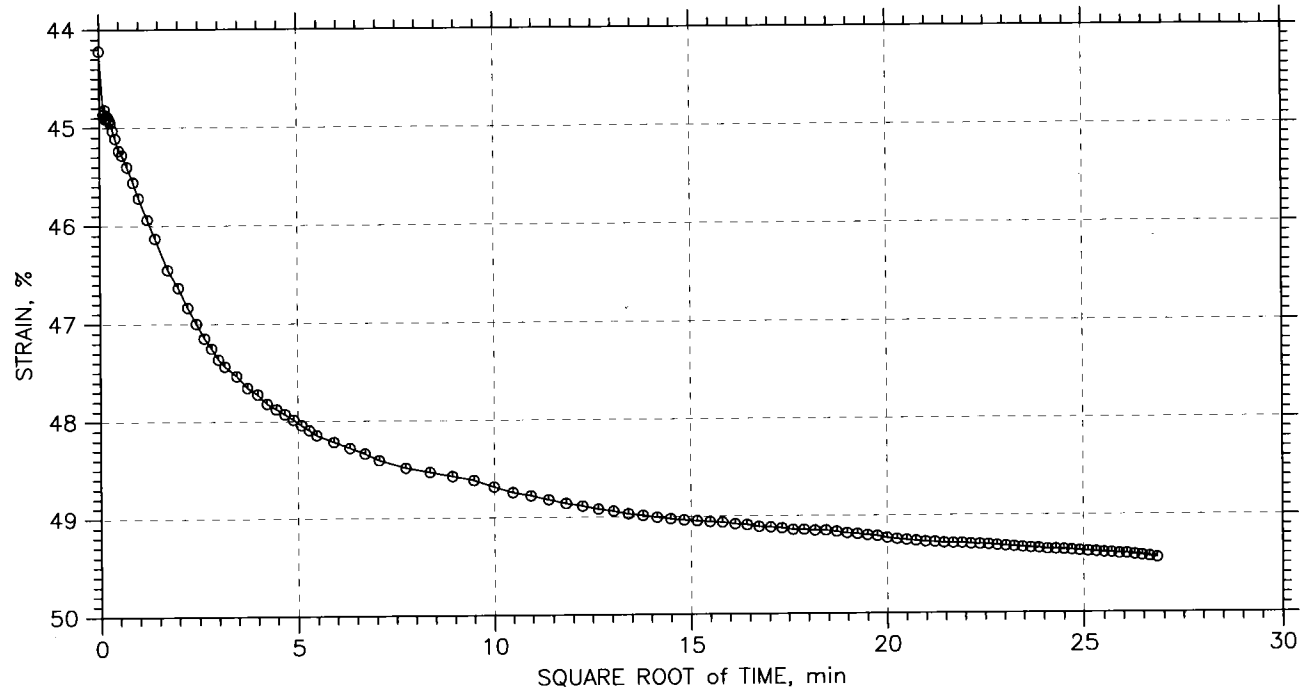
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 20480 psf

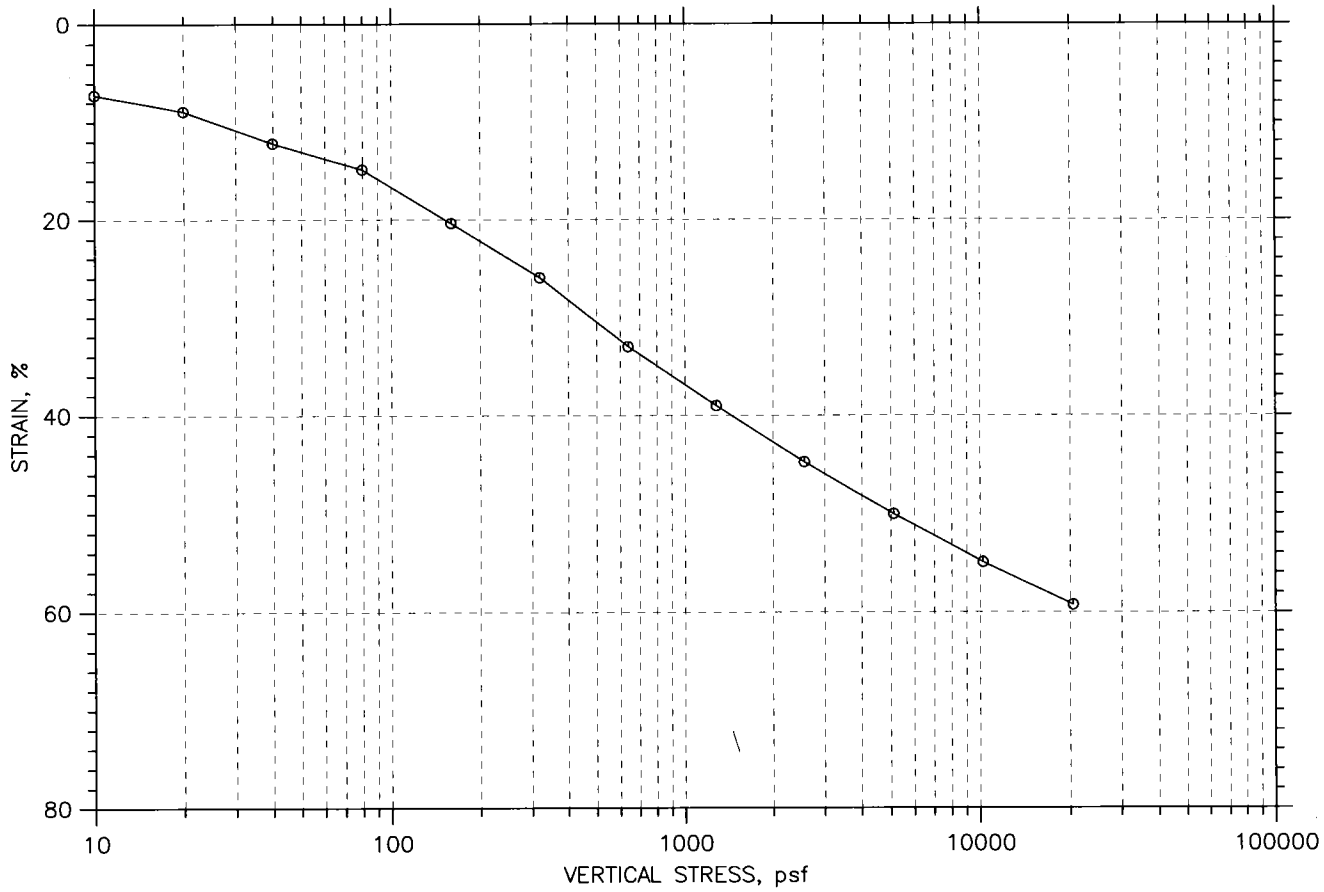


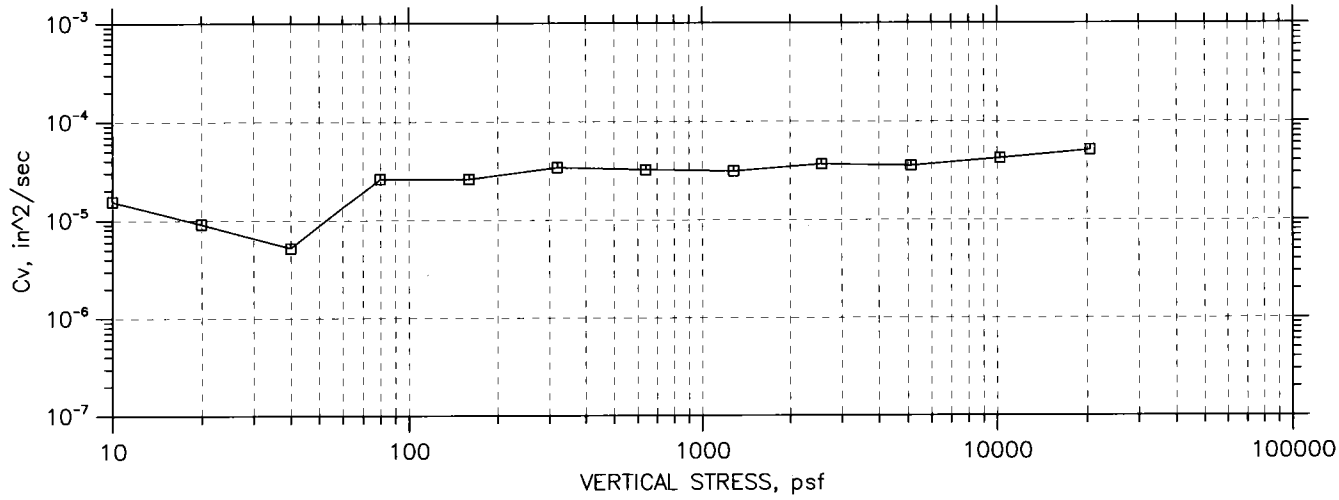


GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 8-02	Test Date: 08/05/09	Depth: ---
	Test No.: C-1	Sample Type: tube	Elevation: ---
	Description: Wet, gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT

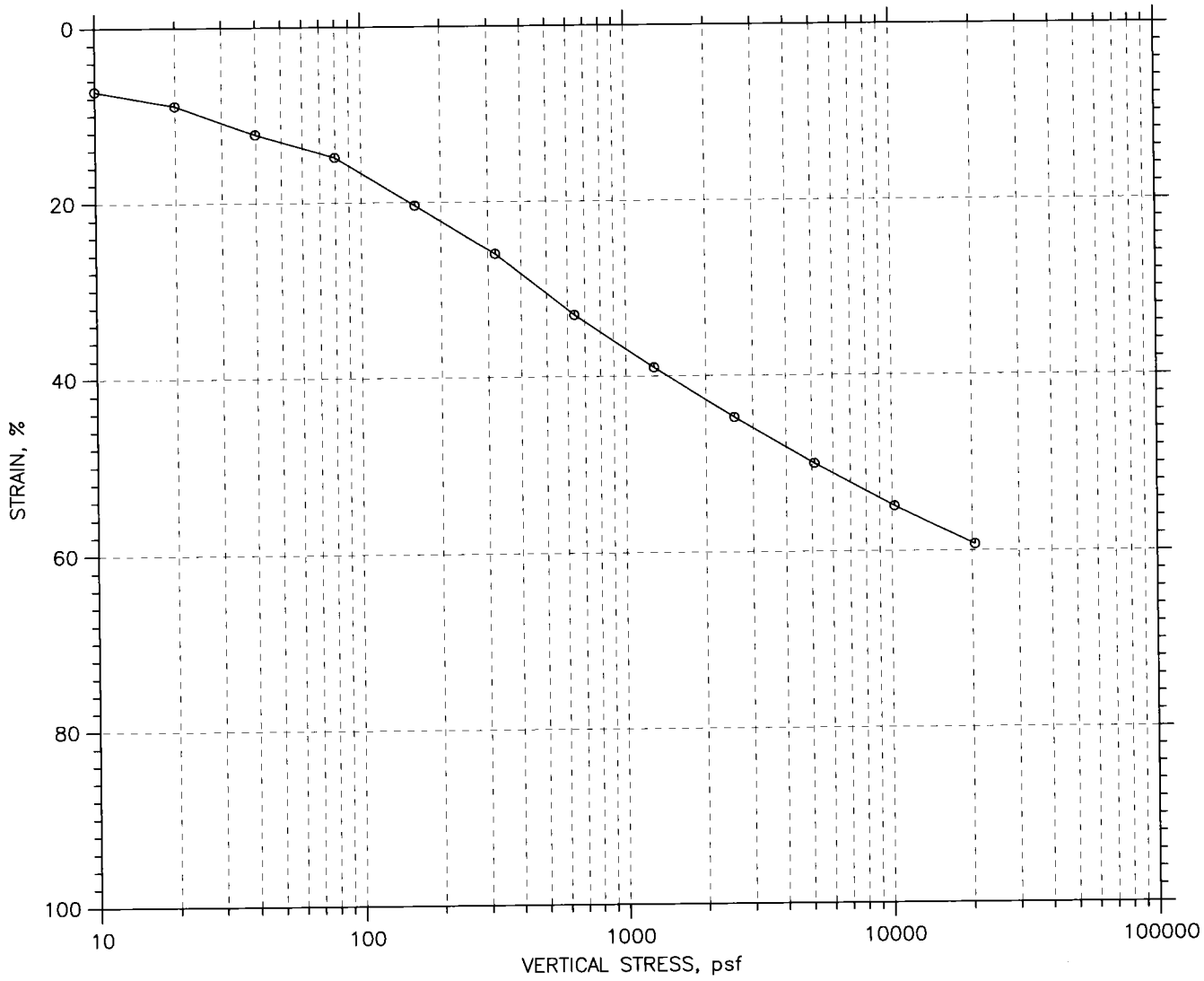




GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT



				Before Test	After Test
Overburden Pressure: ---				Water Content, %	122.34	29.15
Preconsolidation Pressure: ---				Dry Unit Weight, pcf	39.79	98.06
Compression Index: ---				Saturation, %	99.95	100.00
Diameter: 2.5 in		Height: 1 in		Void Ratio	3.55	0.84
LL: ---	PL: ---	PI: ---	GS: 2.90			

GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 32-1
Test No.: C-4

Location: Boston, MA
Tested By: md
Test Date: 08/17/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

Estimated Specific Gravity: 2.90
Initial Void Ratio: 3.55
Final Void Ratio: 0.84

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.00 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	3972	RING		4388
Wt. Container + Wet Soil, gm	349.59	329.57	281.8	75.67
Wt. Container + Dry Soil, gm	176.66	266.85	266.85	60.51
Wt. Container, gm	8.16	215.59	215.59	8.51
Wt. Dry Soil, gm	168.5	51.264	51.264	52
Water Content, %	102.63	122.34	29.15	29.15
Void Ratio	---	3.55	0.84	---
Degree of Saturation, %	---	99.95	100.00	---
Dry Unit Weight, pcf	---	39.785	98.055	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 32-1
Test No.: C-4

Location: Boston, MA
Tested By: md
Test Date: 08/17/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

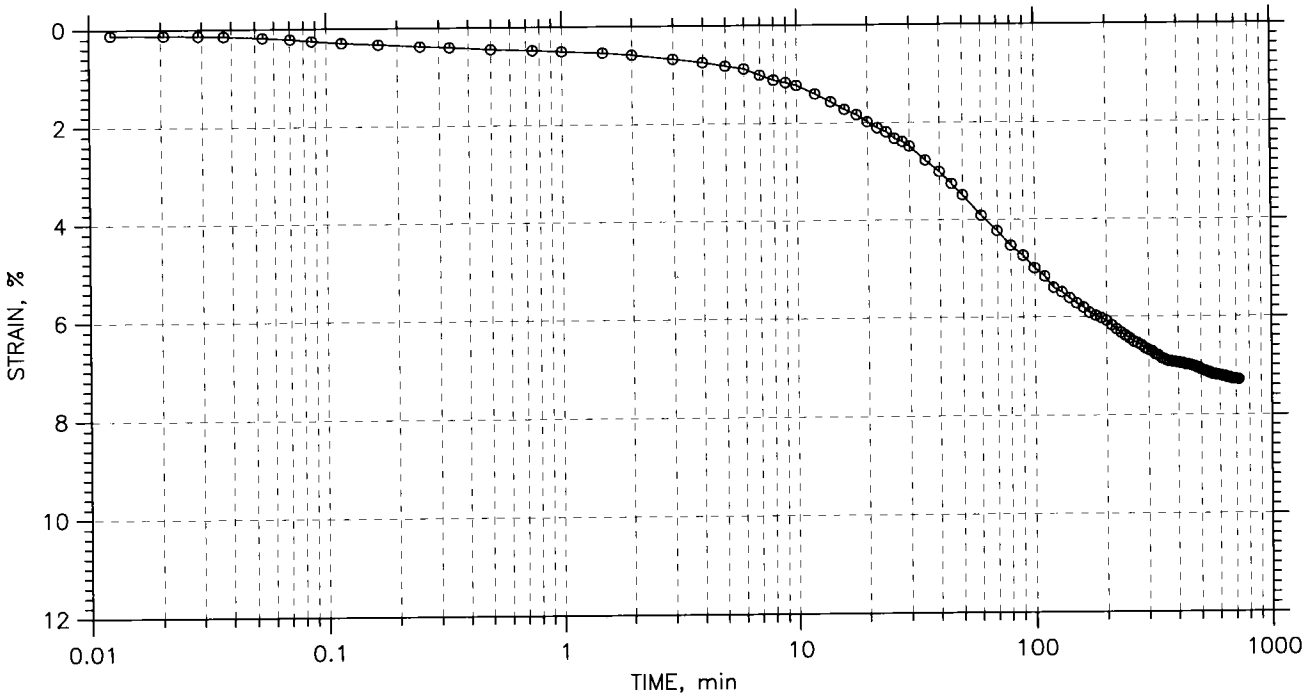
	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	10	0.07298	3.215	7.30	52.7	48.2	1.45e-005	1.58e-005	1.51e-005
2	20	0.08967	3.139	8.97	78.3	0.0	8.86e-006	0.00e+000	8.86e-006
3	40	0.1223	2.990	12.23	129.6	0.0	5.07e-006	0.00e+000	5.07e-006
4	80	0.1489	2.869	14.89	24.0	0.0	2.56e-005	0.00e+000	2.56e-005
5	160	0.204	2.619	20.40	22.1	21.5	2.53e-005	2.59e-005	2.56e-005
6	320	0.2596	2.366	25.96	15.2	13.8	3.19e-005	3.52e-005	3.35e-005
7	640	0.3301	2.046	33.01	12.9	12.9	3.16e-005	3.16e-005	3.16e-005
8	1.28e+003	0.3905	1.771	39.05	12.8	9.2	2.62e-005	3.67e-005	3.06e-005
9	2.56e+003	0.4479	1.510	44.79	8.1	7.3	3.43e-005	3.80e-005	3.61e-005
10	5.12e+003	0.5011	1.268	50.11	8.1	5.0	2.81e-005	4.53e-005	3.47e-005
11	1.02e+004	0.5504	1.044	55.04	5.0	4.0	3.73e-005	4.65e-005	4.14e-005
12	2.05e+004	0.5943	0.845	59.43	3.3	2.7	4.63e-005	5.51e-005	5.03e-005

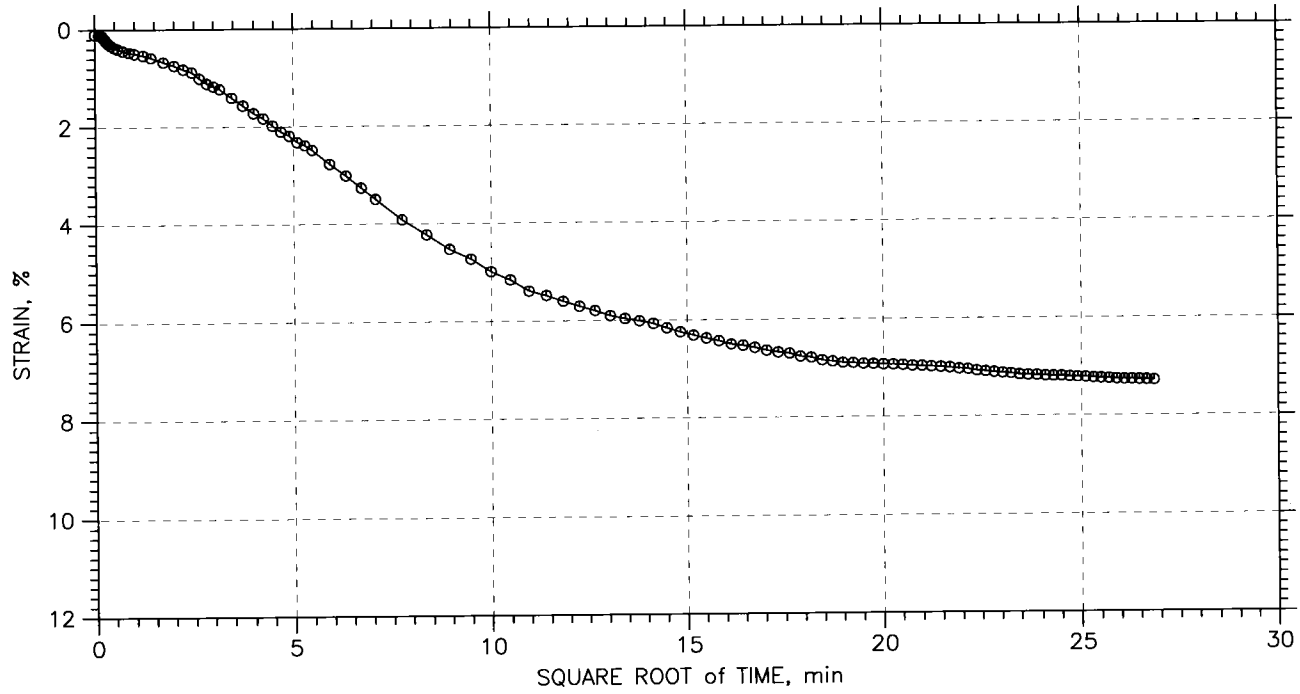
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 10. psf





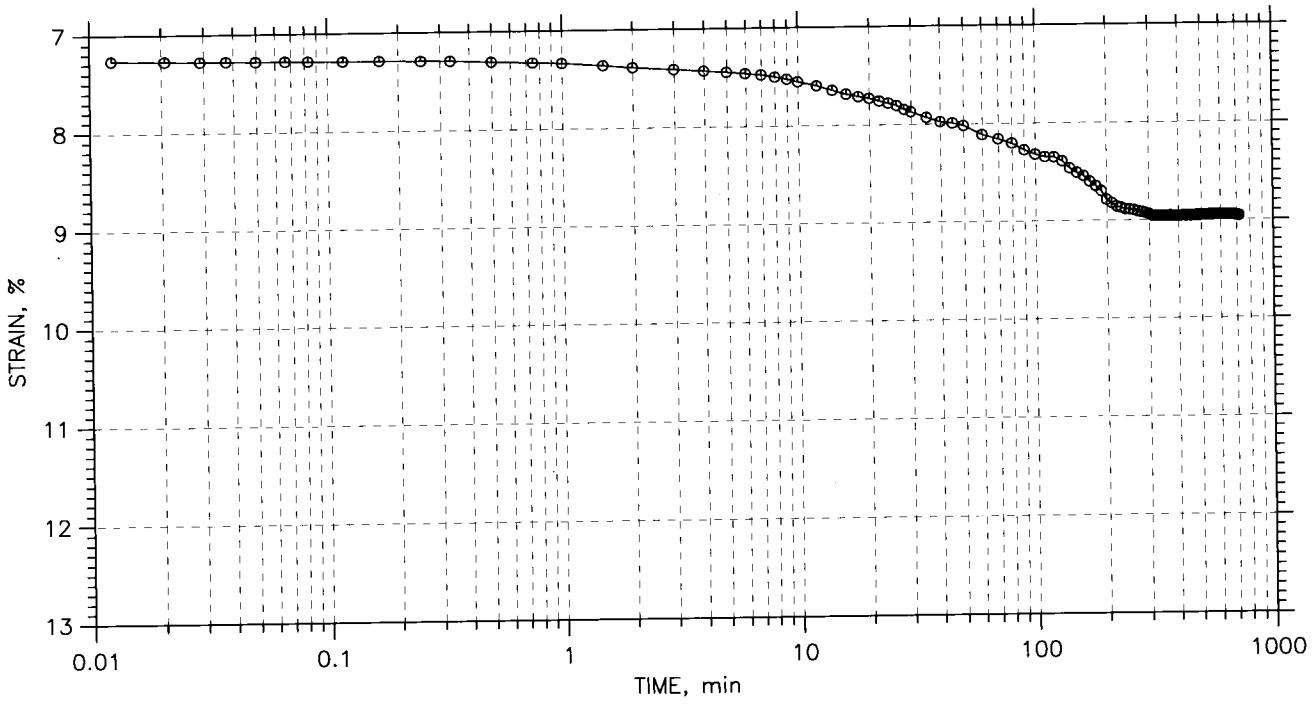
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

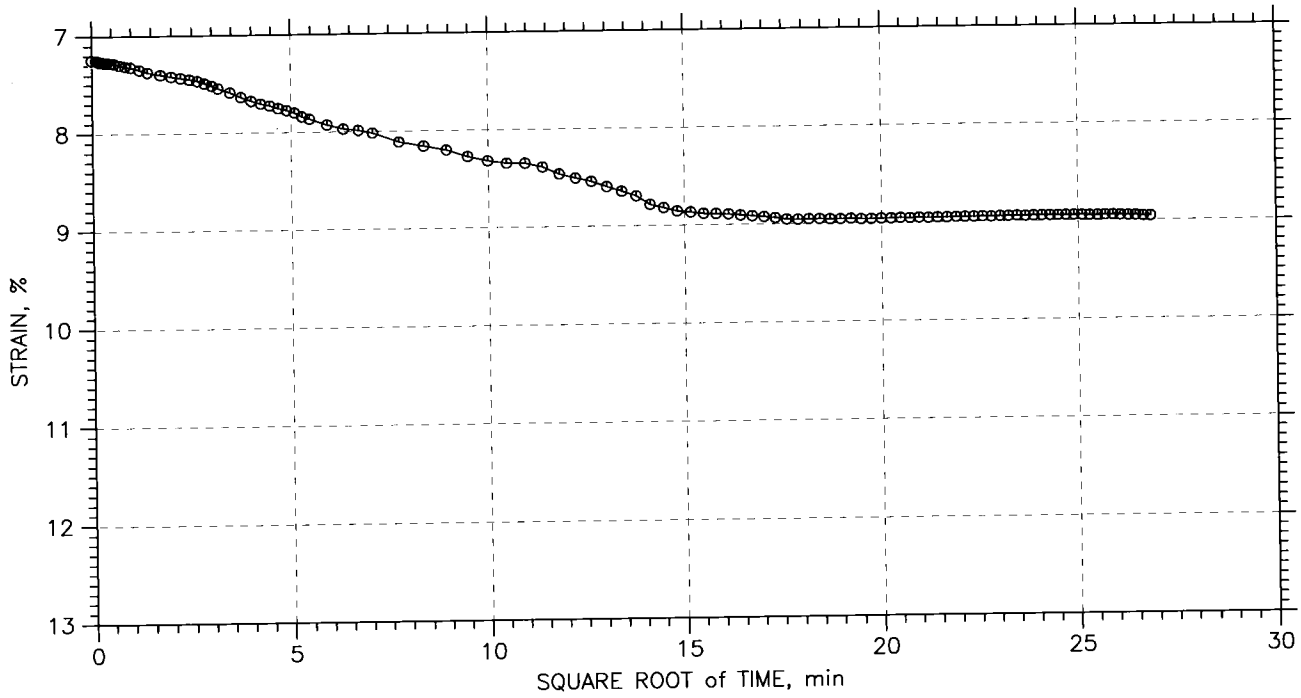
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 20. psf





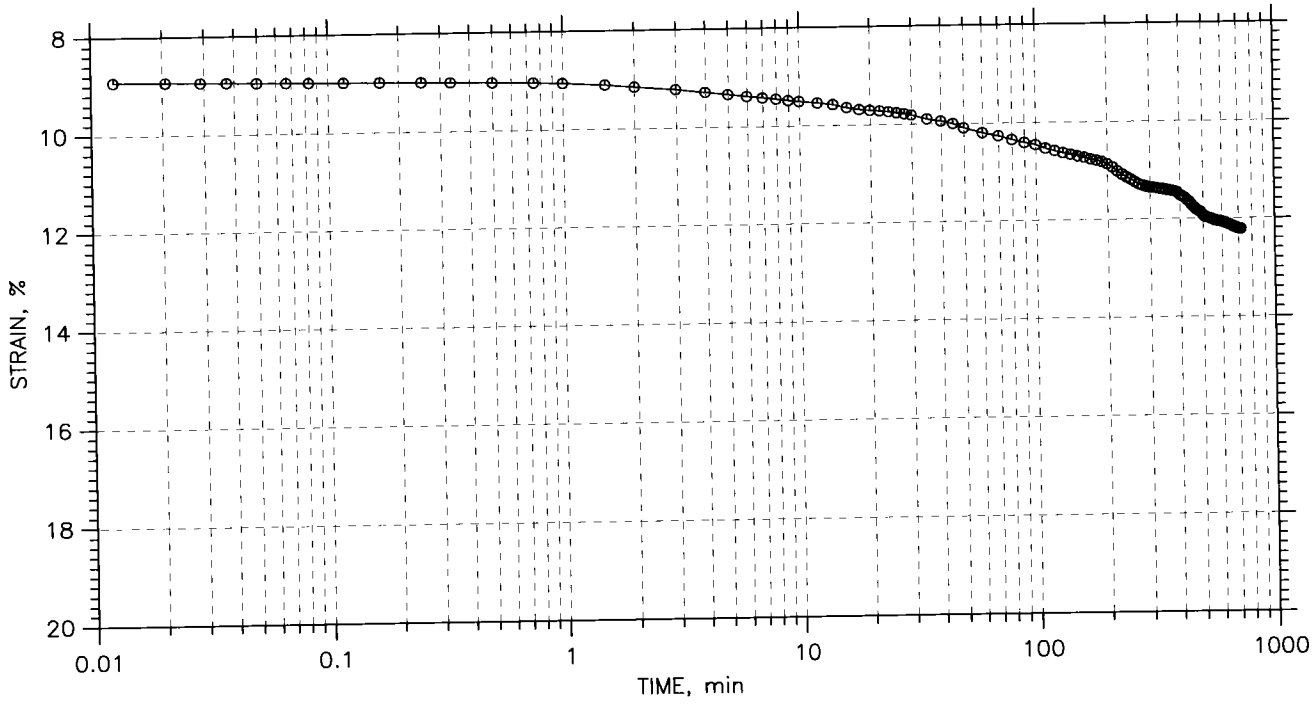
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

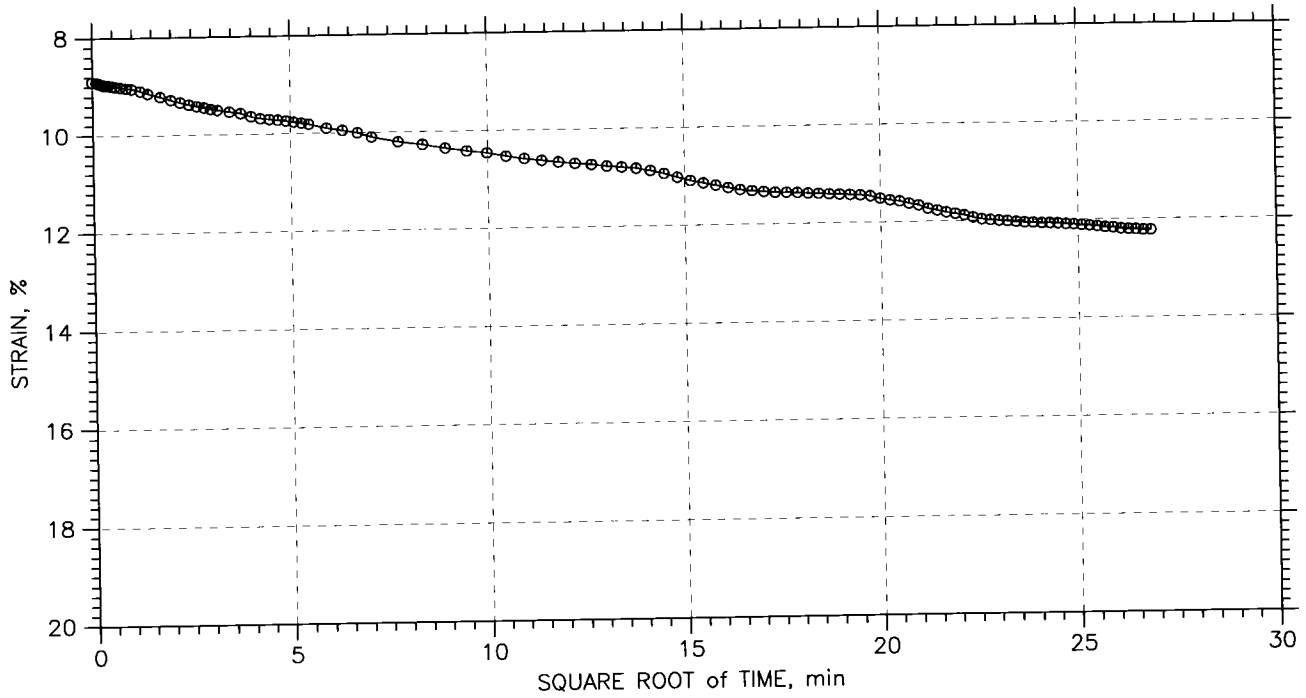
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 40. psf





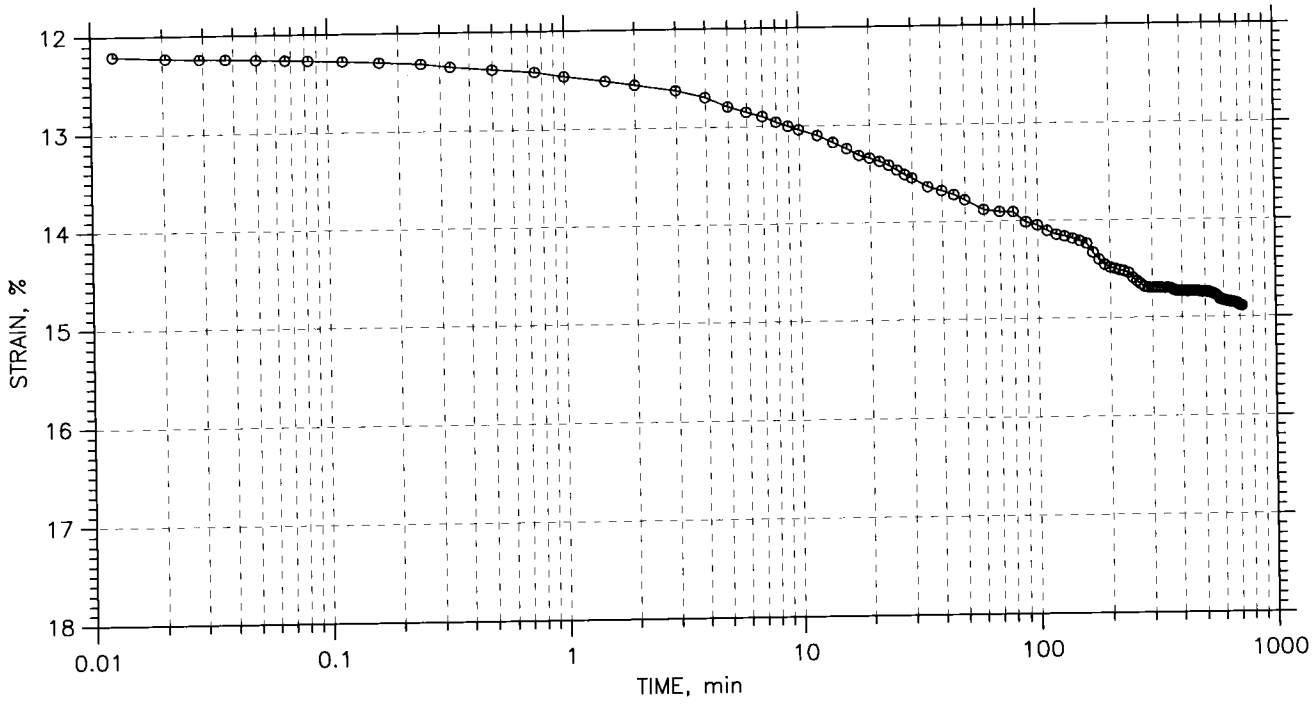
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

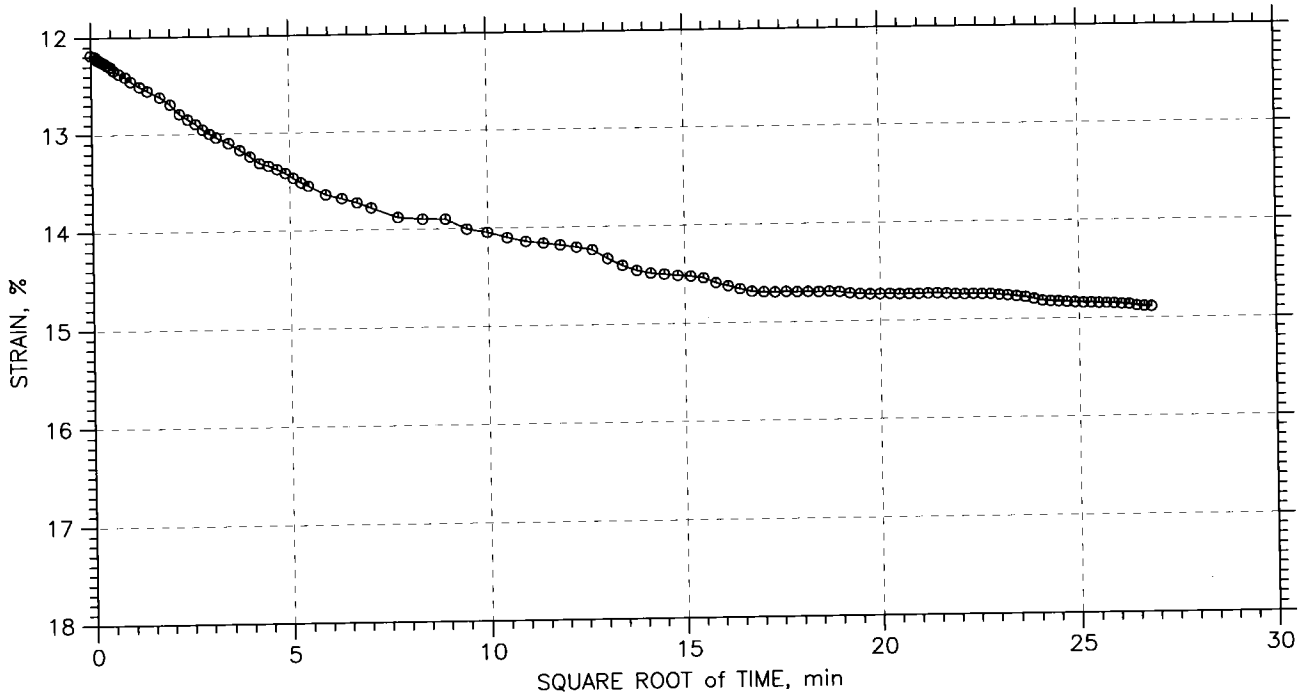
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 80. psf





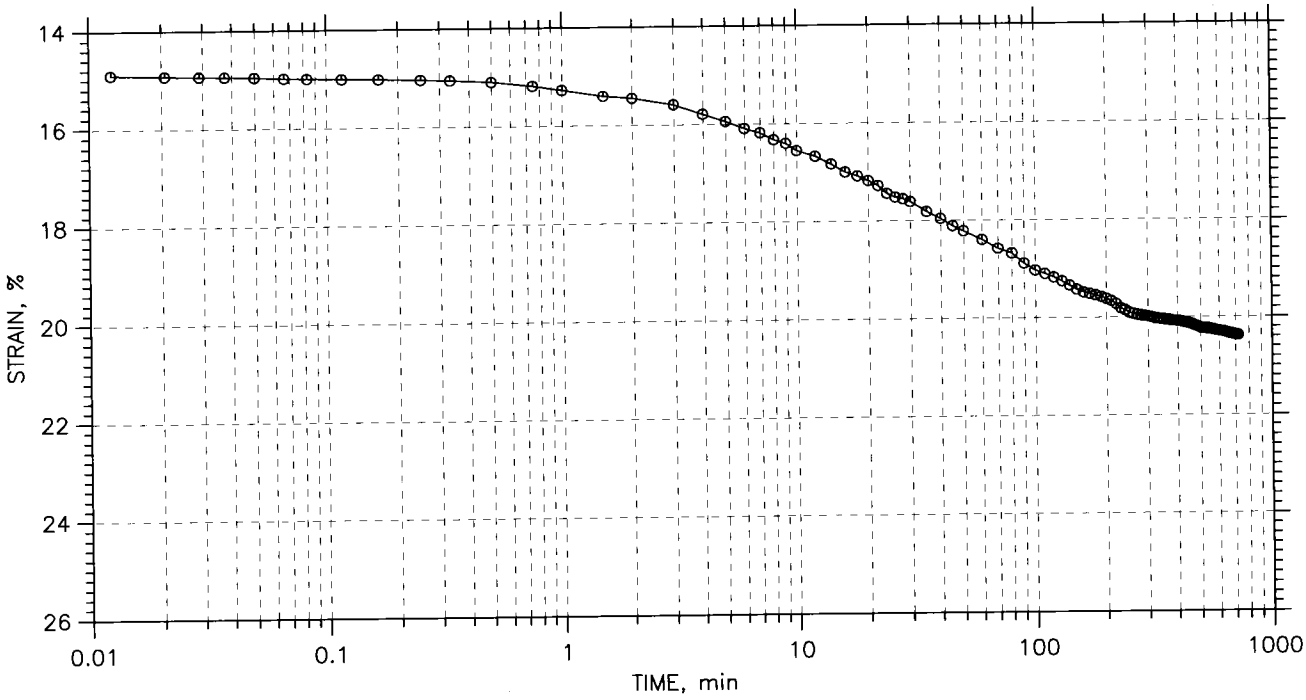
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

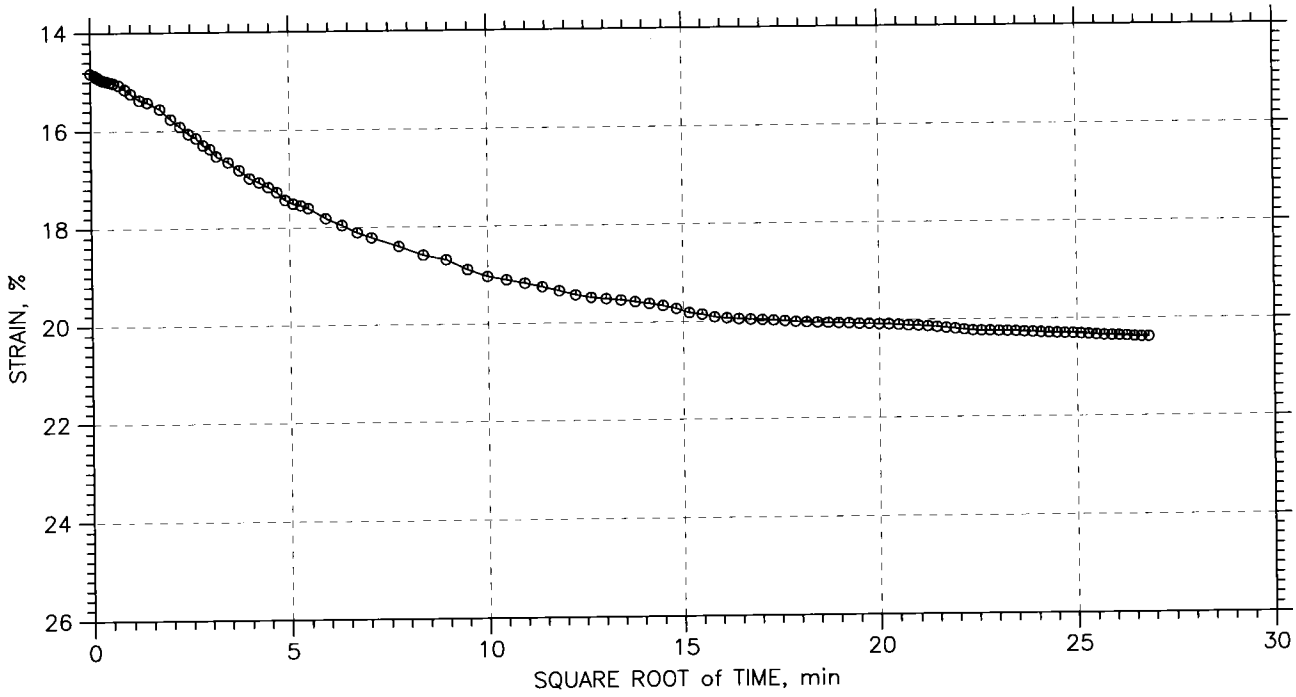
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 160. psf





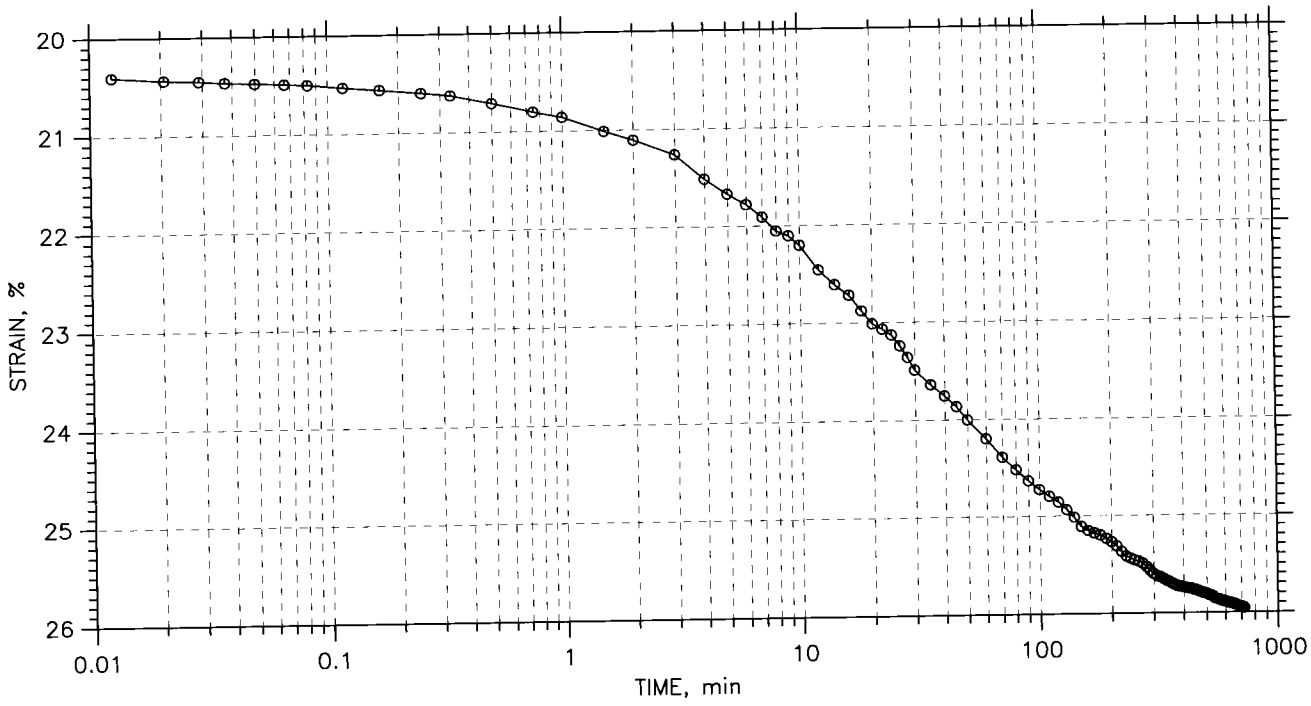
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

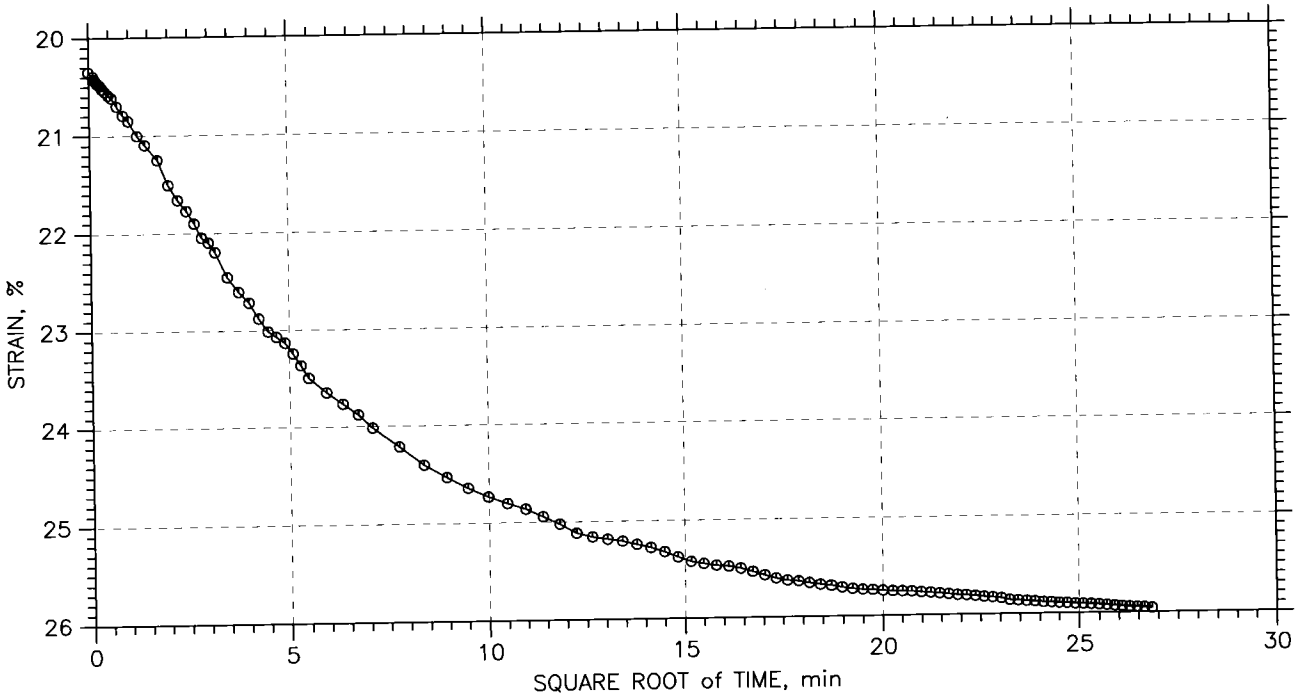
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 320. psf





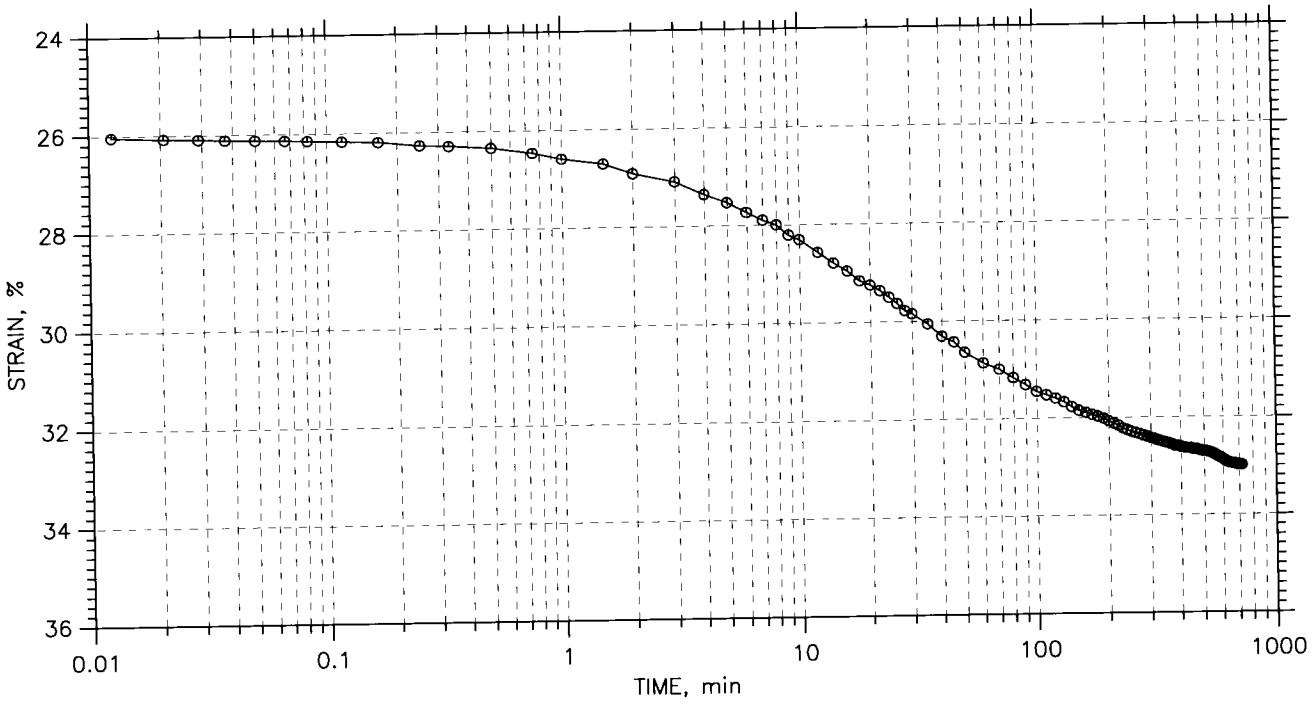
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

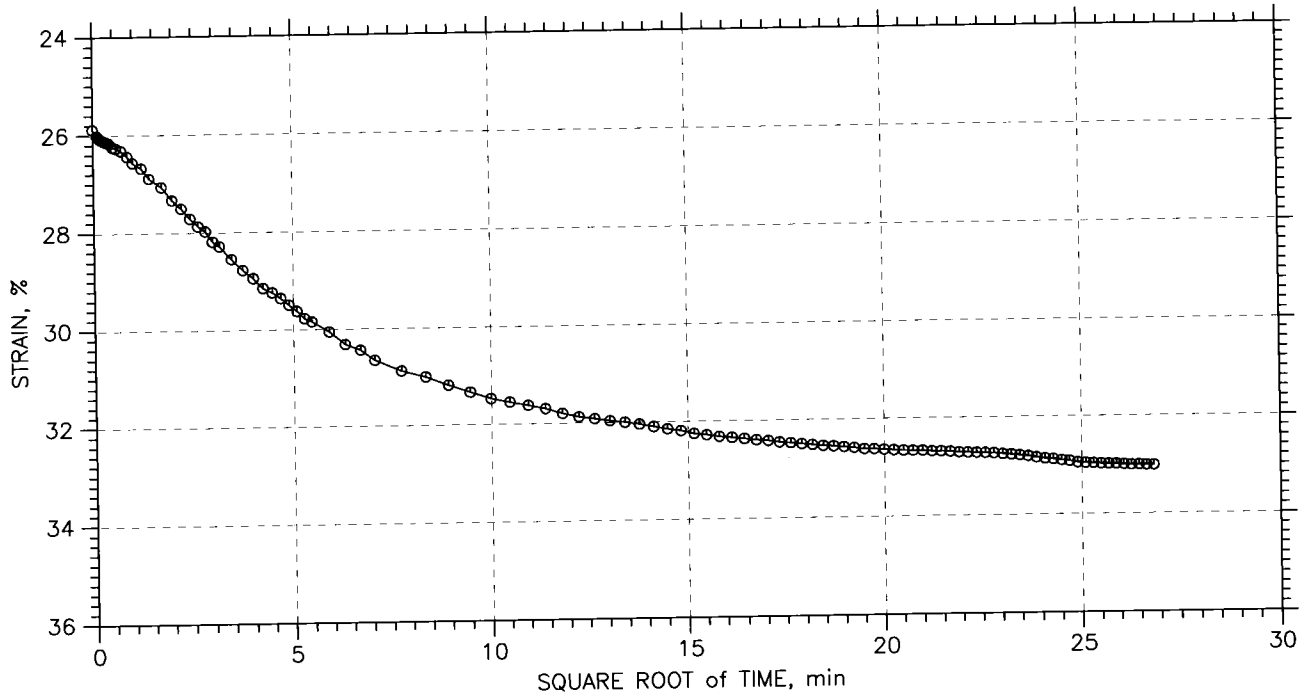
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 640. psf





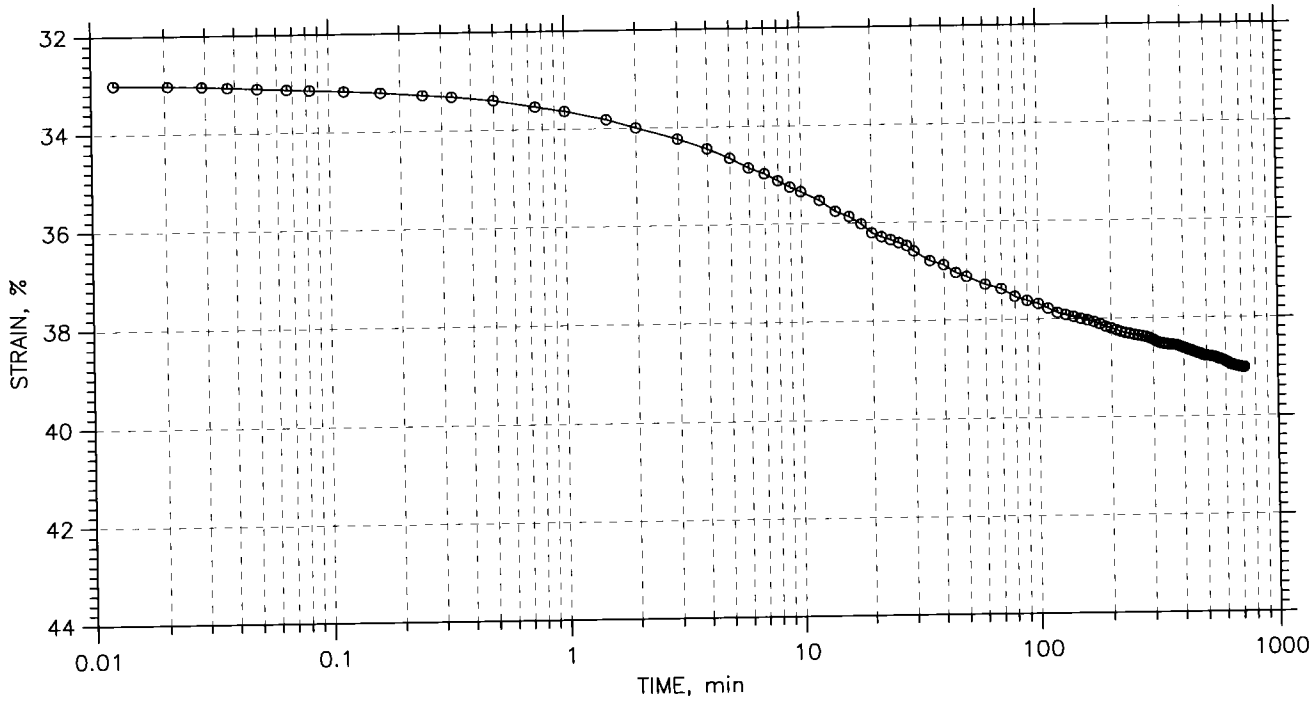
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

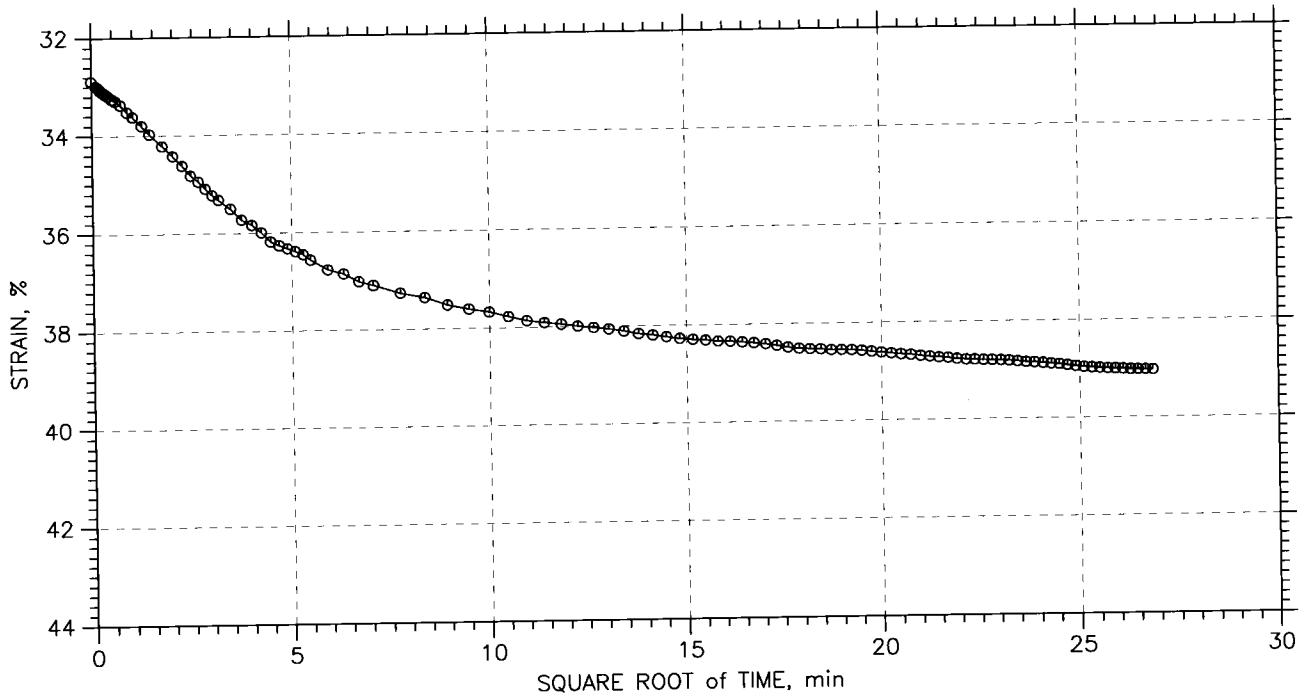
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 1280. psf





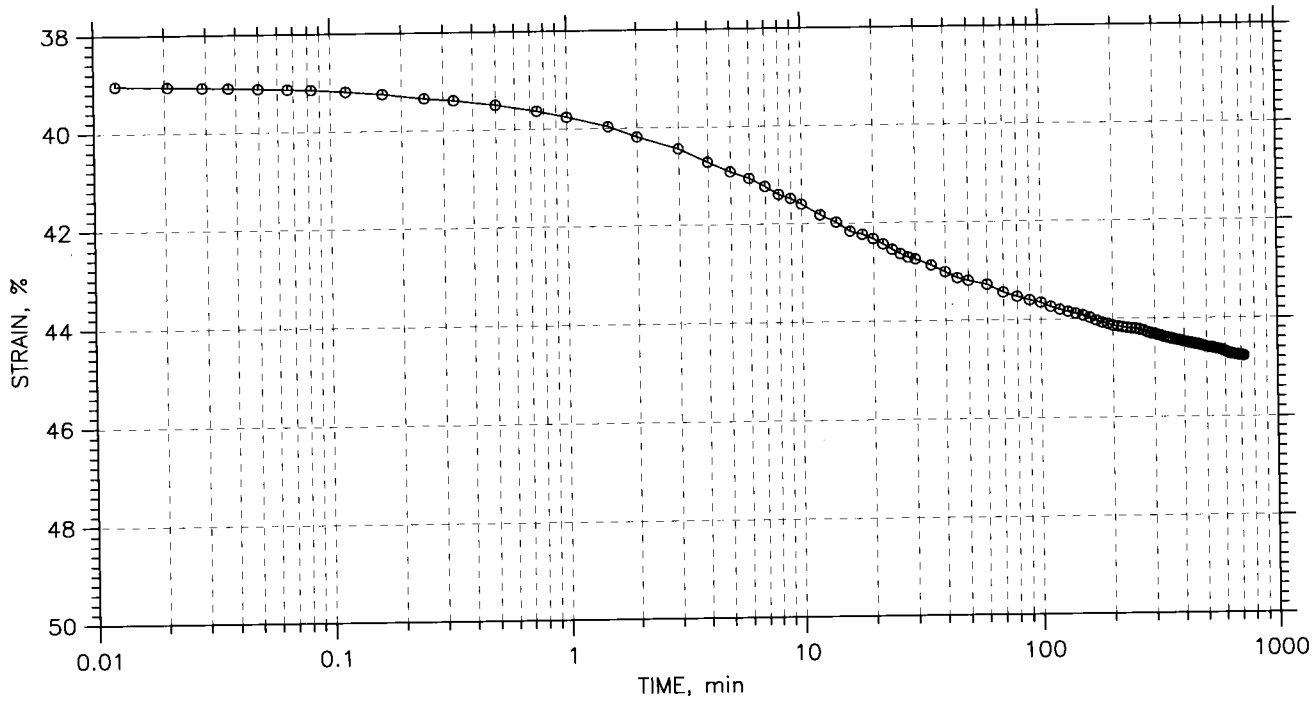
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

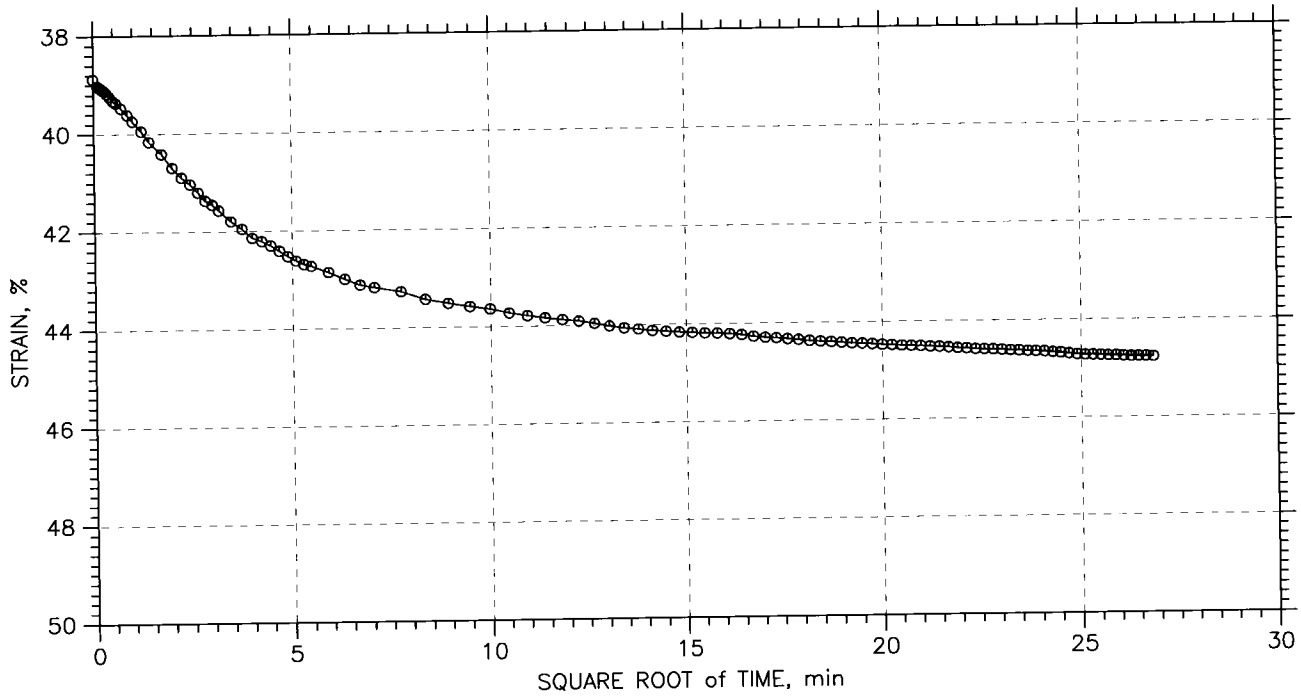
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 2560. psf





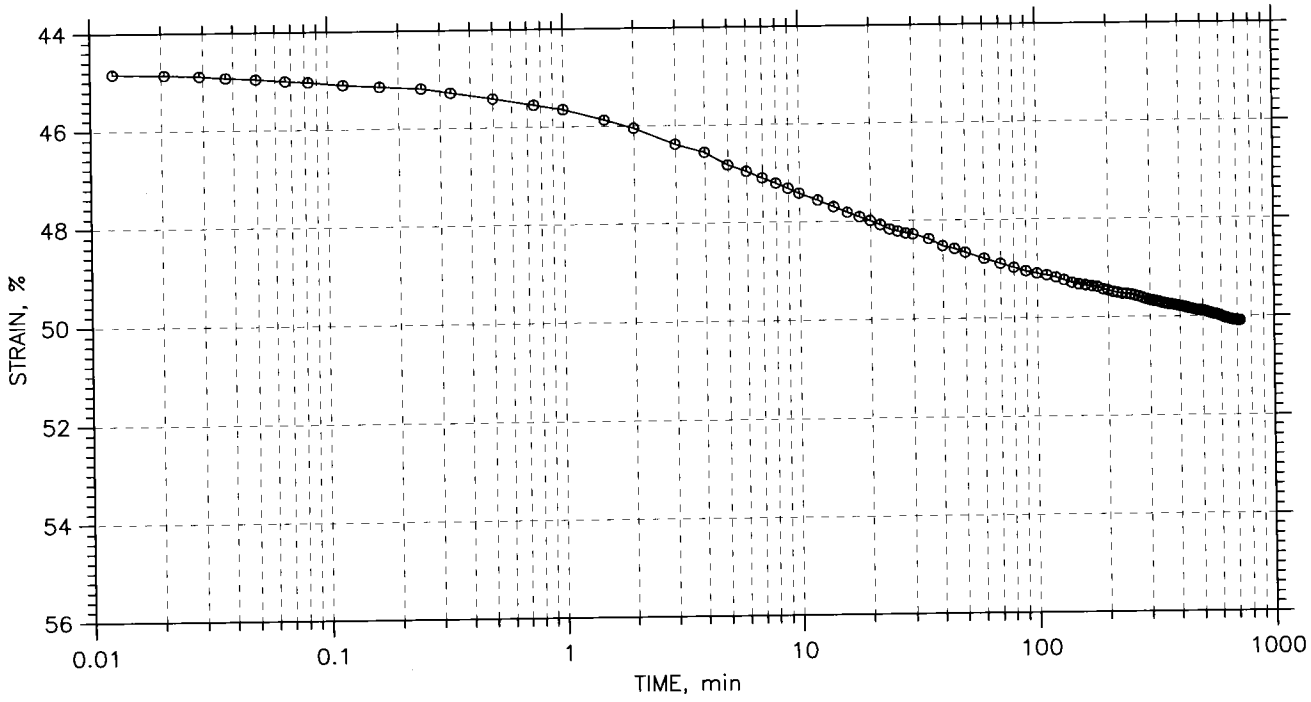
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

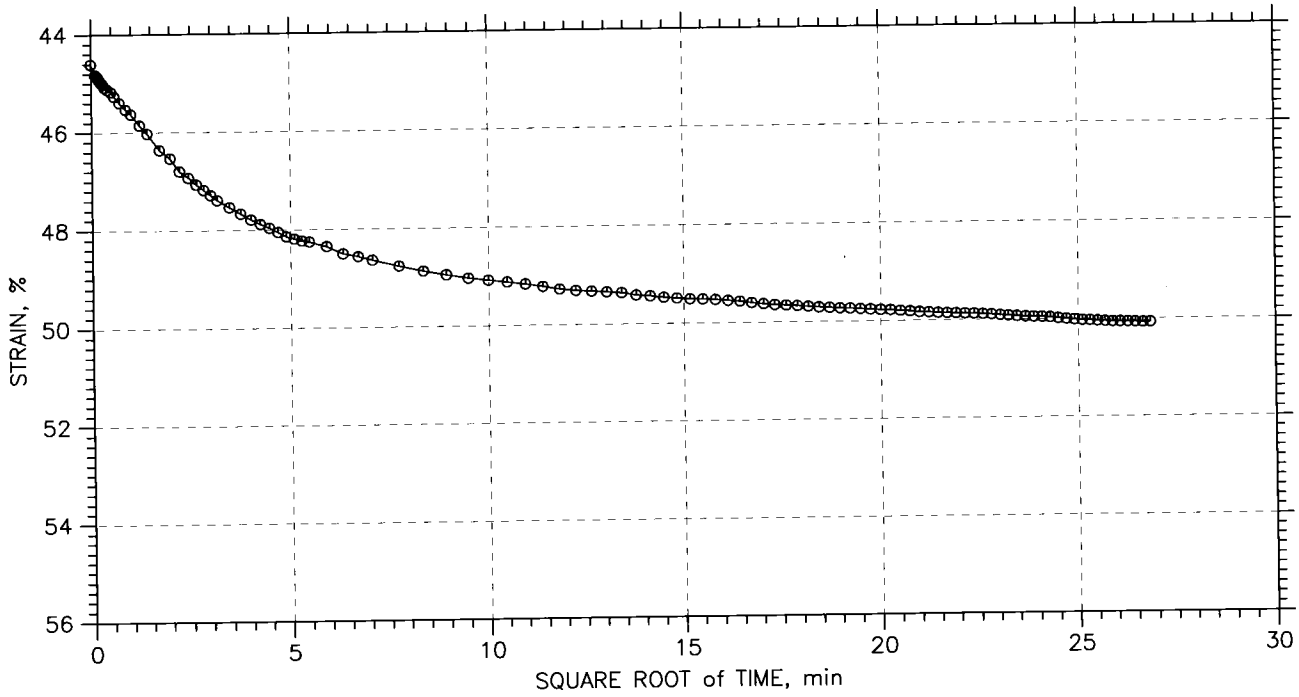
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 5120. psf





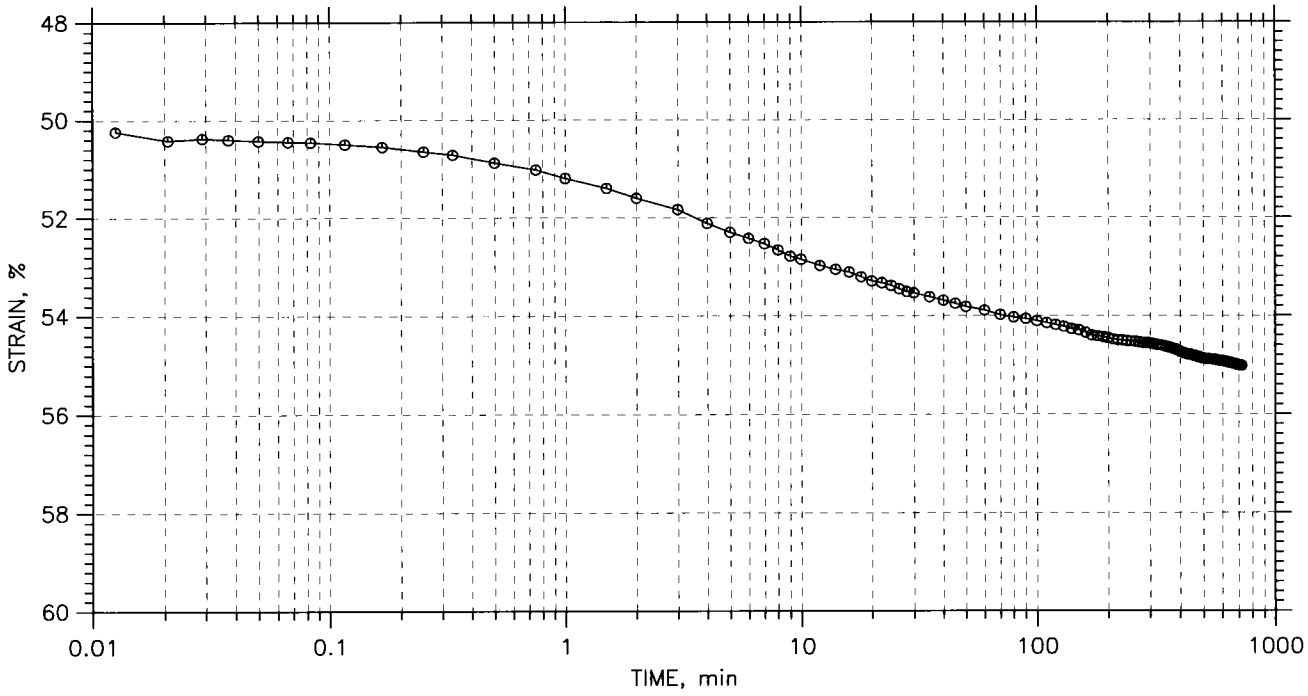
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

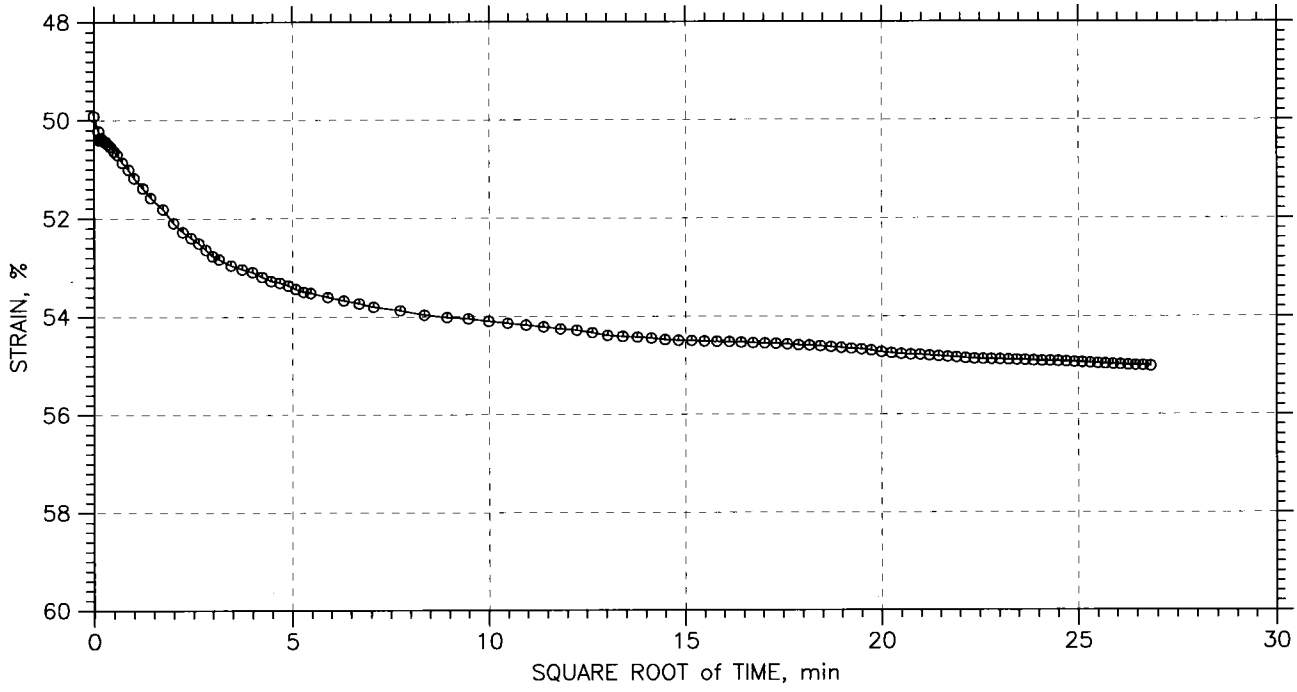
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 10240 psf





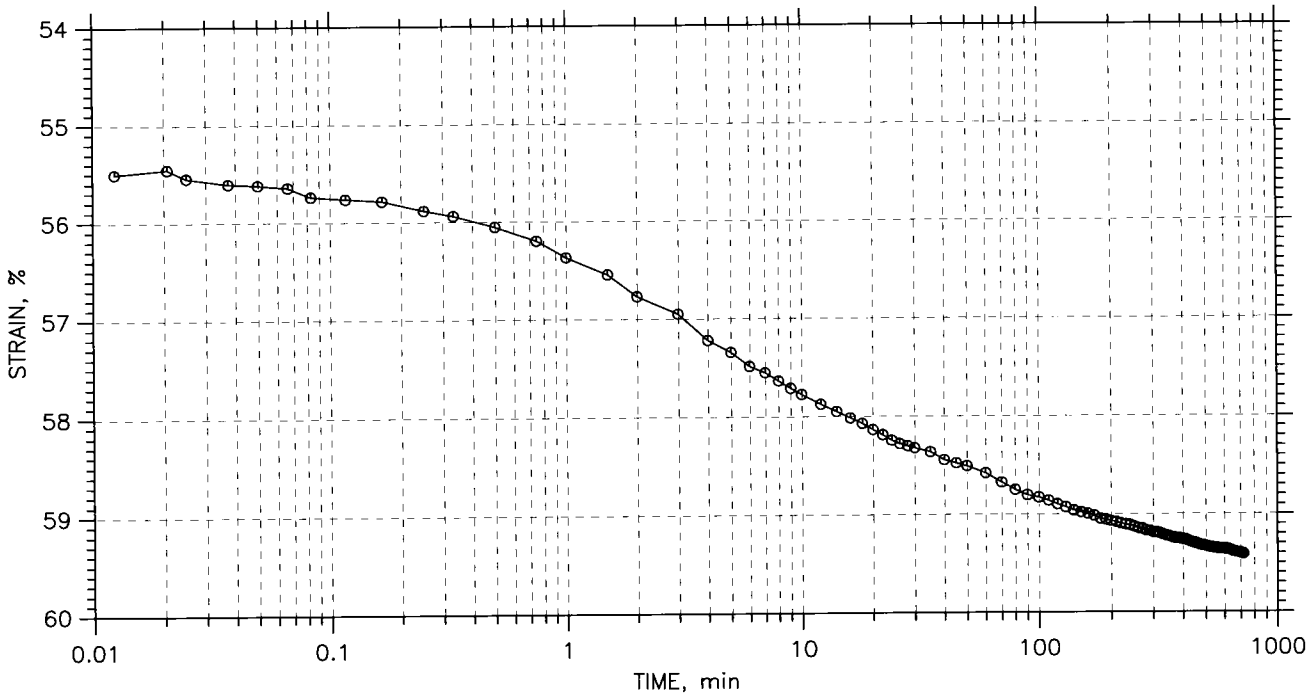
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

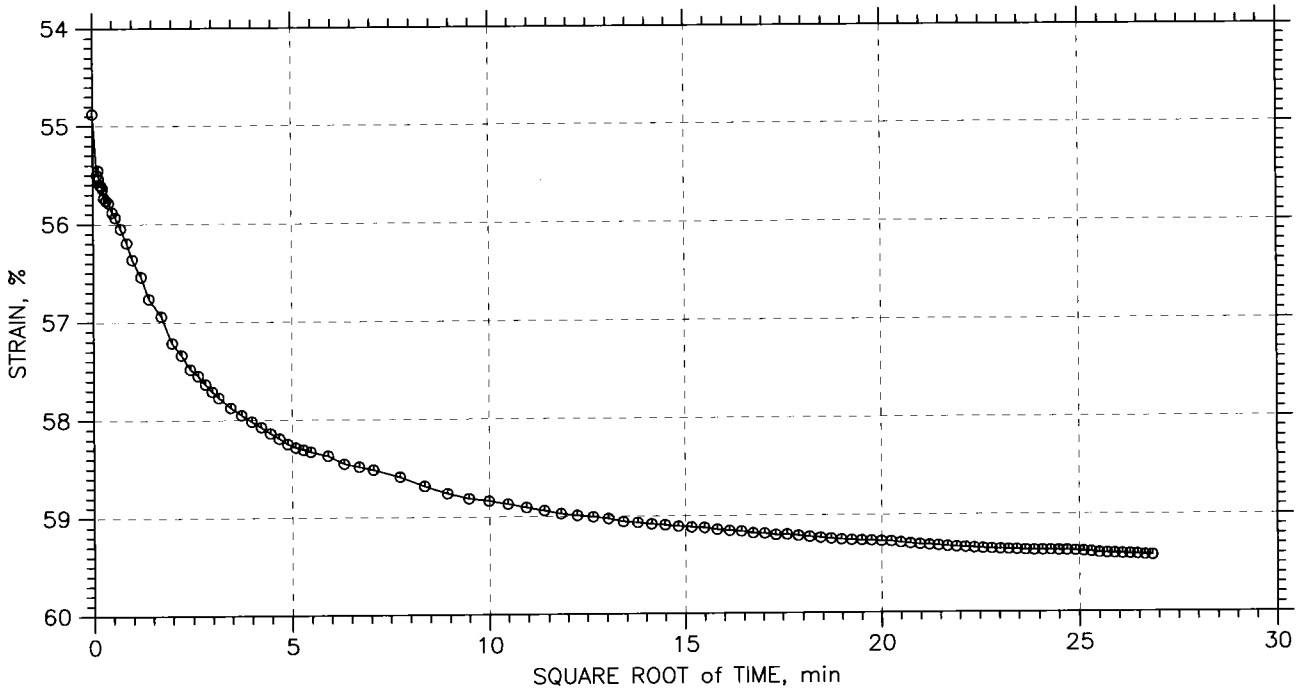
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 20480 psf

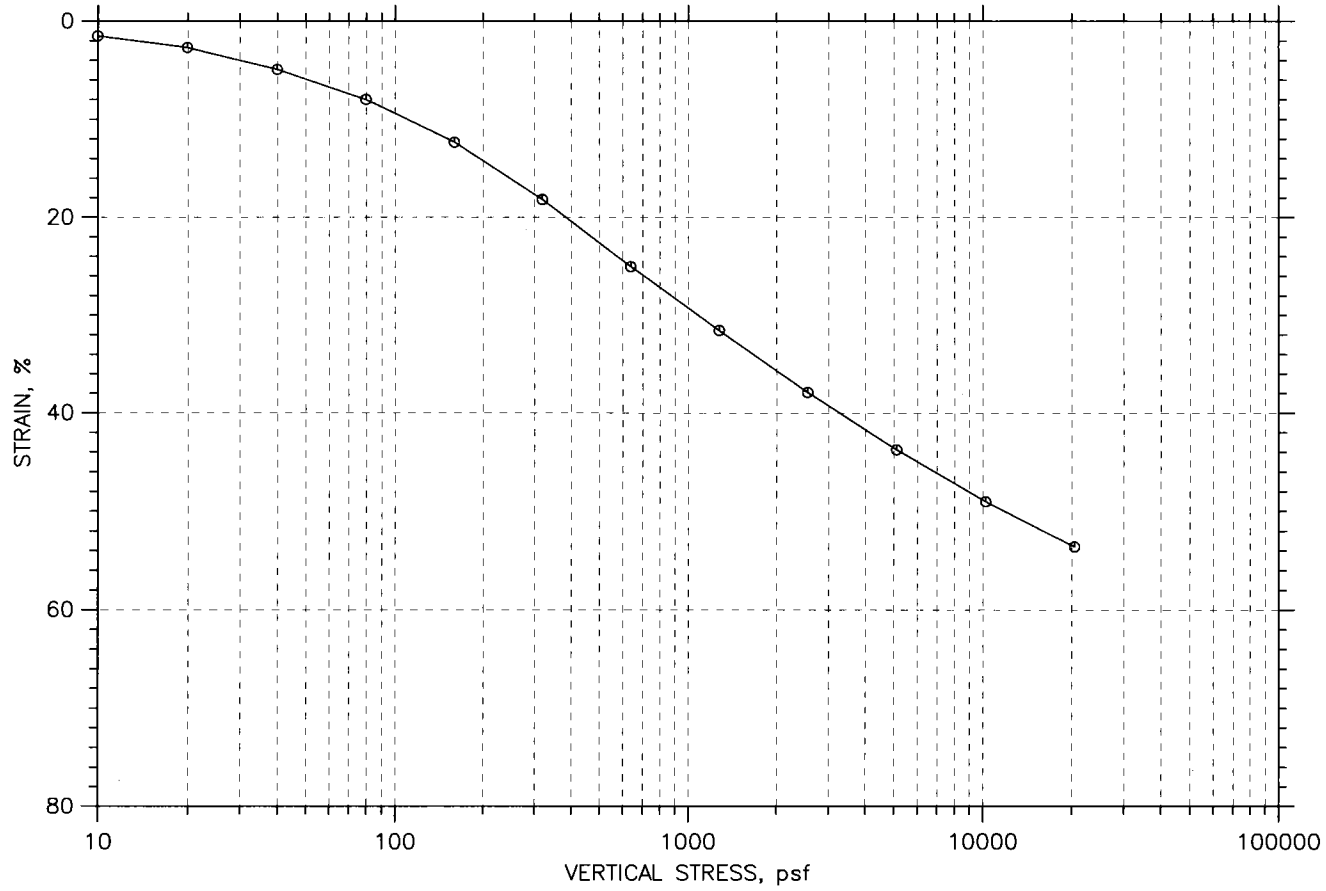


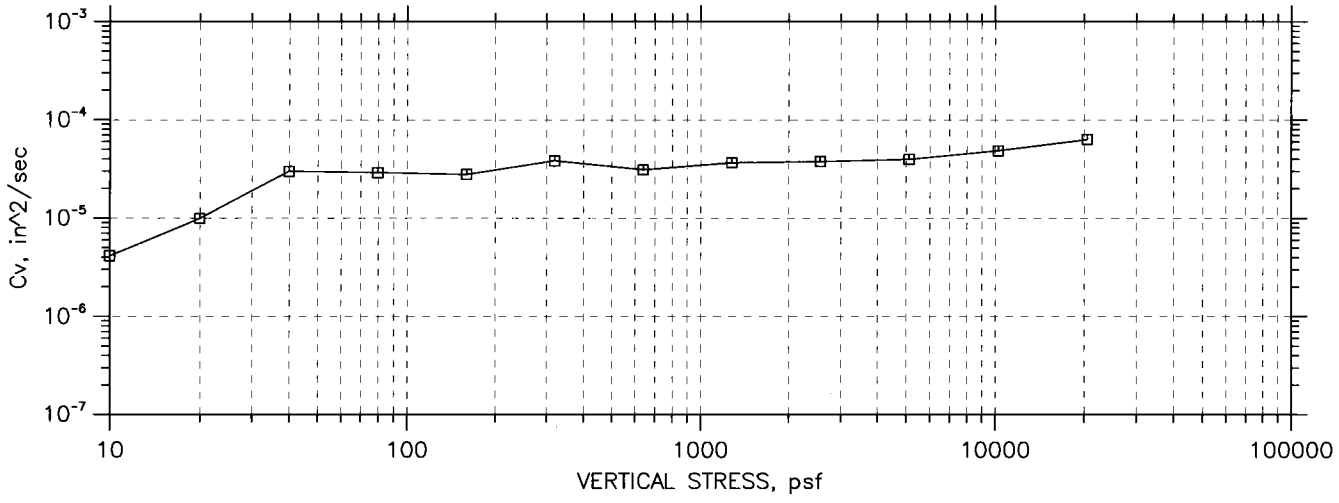


GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 32-1	Test Date: 08/17/09	Depth: ---
	Test No.: C-4	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT

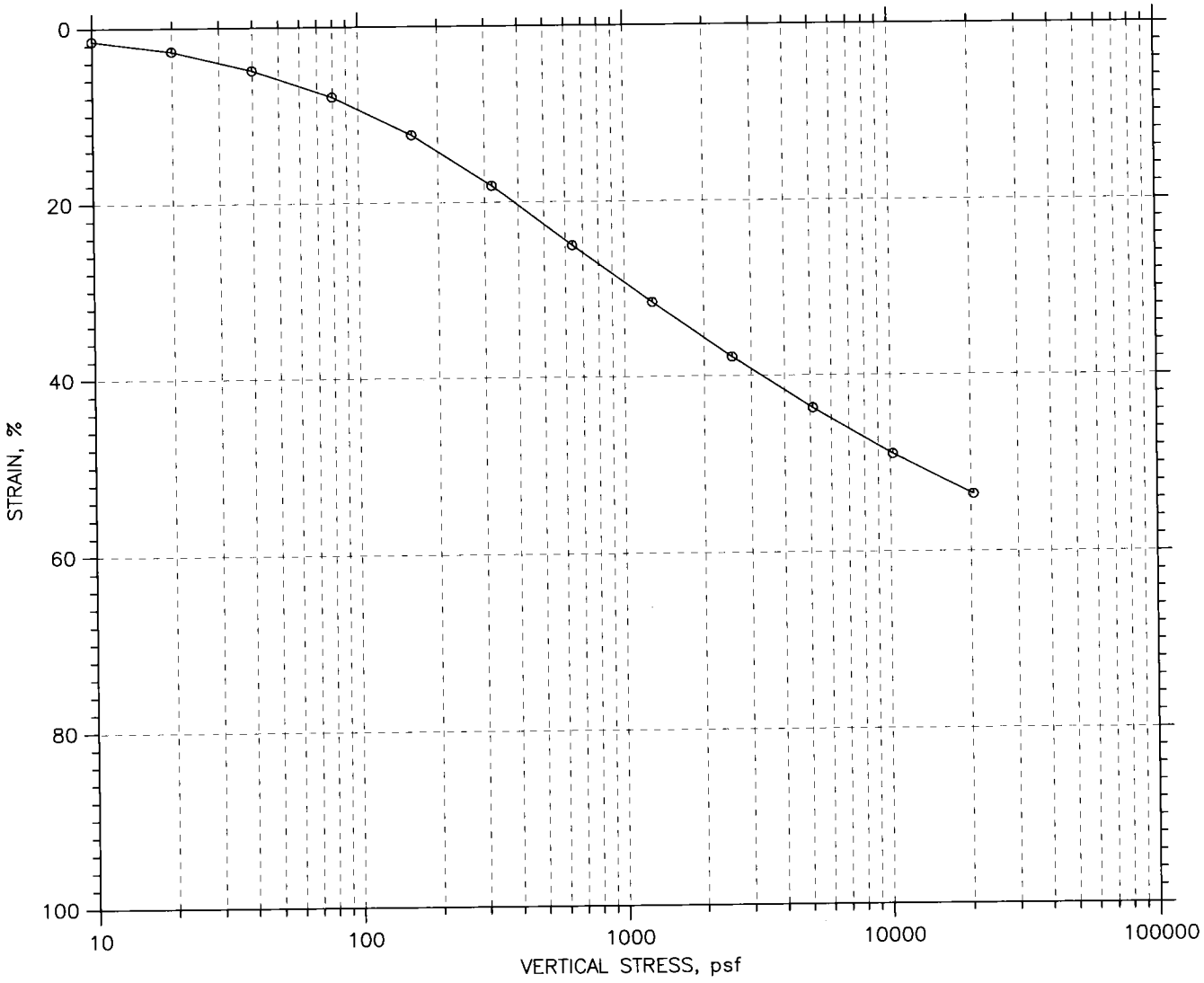




GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT



				Before Test	After Test
Overburden Pressure: ---				Water Content, %	111.89	33.38
Preconsolidation Pressure: ---				Dry Unit Weight, pcf	42.67	92.1
Compression Index: ---				Saturation, %	100.00	100.00
Diameter: 2.5 in		Height: 1 in		Void Ratio	3.25	0.97
LL: ---	PL: ---	PI: ---	GS: 2.91			

GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 33-1
Test No.: C-2

Location: Boston, MA
Tested By: md
Test Date: 08/11/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

Estimated Specific Gravity: 2.91
Initial Void Ratio: 3.25
Final Void Ratio: 0.97

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.00 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	4274	RING		4245
Wt. Container + Wet Soil, gm	366.92	332.1	288.93	83.14
Wt. Container + Dry Soil, gm	210.05	270.58	270.58	64.39
Wt. Container, gm	8.33	215.59	215.59	8.22
Wt. Dry Soil, gm	201.72	54.985	54.985	56.17
Water Content, %	77.77	111.89	33.38	33.38
Void Ratio	---	3.25	0.97	---
Degree of Saturation, %	---	100.00	100.00	---
Dry Unit Weight, pcf	---	42.673	92.1	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 33-1
Test No.: C-2

Location: Boston, MA
Tested By: md
Test Date: 08/11/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

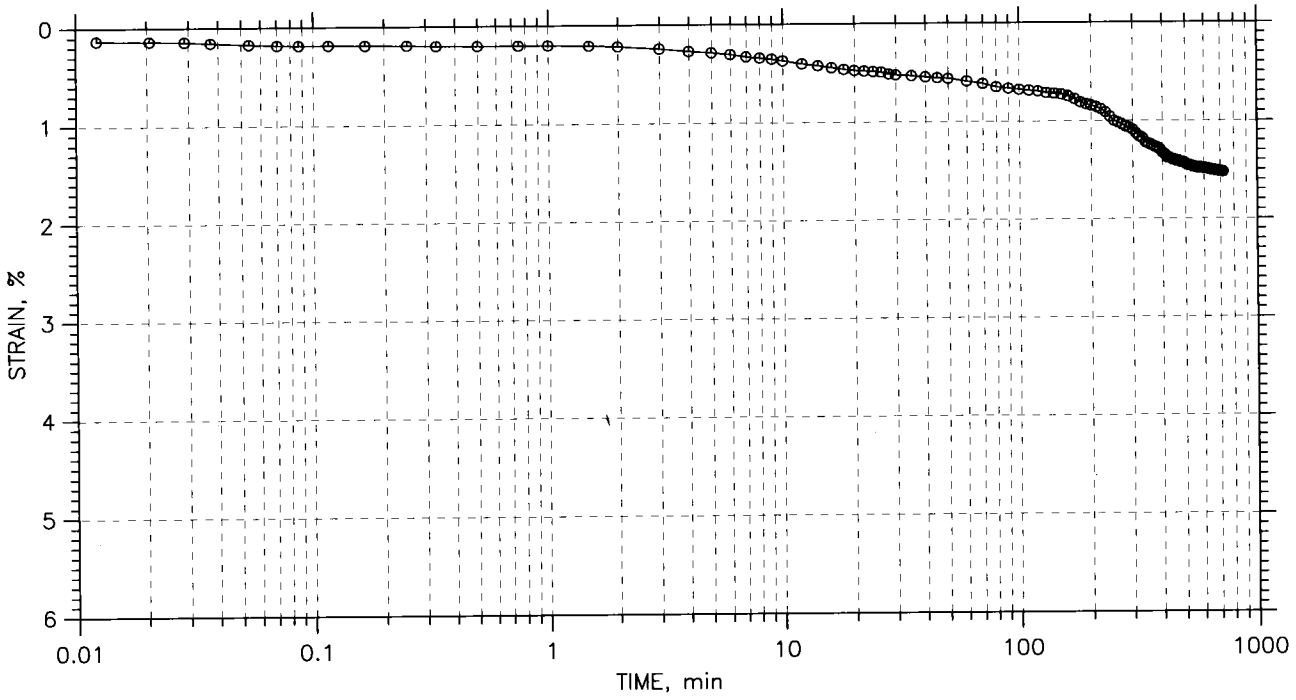
	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	10	0.01533	3.187	1.53	199.5	0.0	4.06e-006	0.00e+000	4.06e-006
2	20	0.02708	3.137	2.71	80.7	0.0	9.76e-006	0.00e+000	9.76e-006
3	40	0.04952	3.042	4.95	25.9	0.0	2.93e-005	0.00e+000	2.93e-005
4	80	0.08033	2.911	8.03	25.2	0.0	2.85e-005	0.00e+000	2.85e-005
5	160	0.124	2.725	12.40	22.8	25.6	2.90e-005	2.58e-005	2.73e-005
6	320	0.1821	2.478	18.21	15.3	16.1	3.85e-005	3.67e-005	3.76e-005
7	640	0.2507	2.186	25.07	17.2	15.9	2.93e-005	3.18e-005	3.05e-005
8	1.28e+003	0.3158	1.909	31.58	12.6	10.7	3.35e-005	3.93e-005	3.62e-005
9	2.56e+003	0.3789	1.641	37.89	10.5	8.3	3.34e-005	4.21e-005	3.72e-005
10	5.12e+003	0.4374	1.393	43.74	8.2	6.4	3.50e-005	4.47e-005	3.93e-005
11	1.02e+004	0.4905	1.167	49.05	5.7	4.2	4.13e-005	5.67e-005	4.78e-005
12	2.05e+004	0.5367	0.970	53.67	3.2	3.1	6.14e-005	6.35e-005	6.25e-005

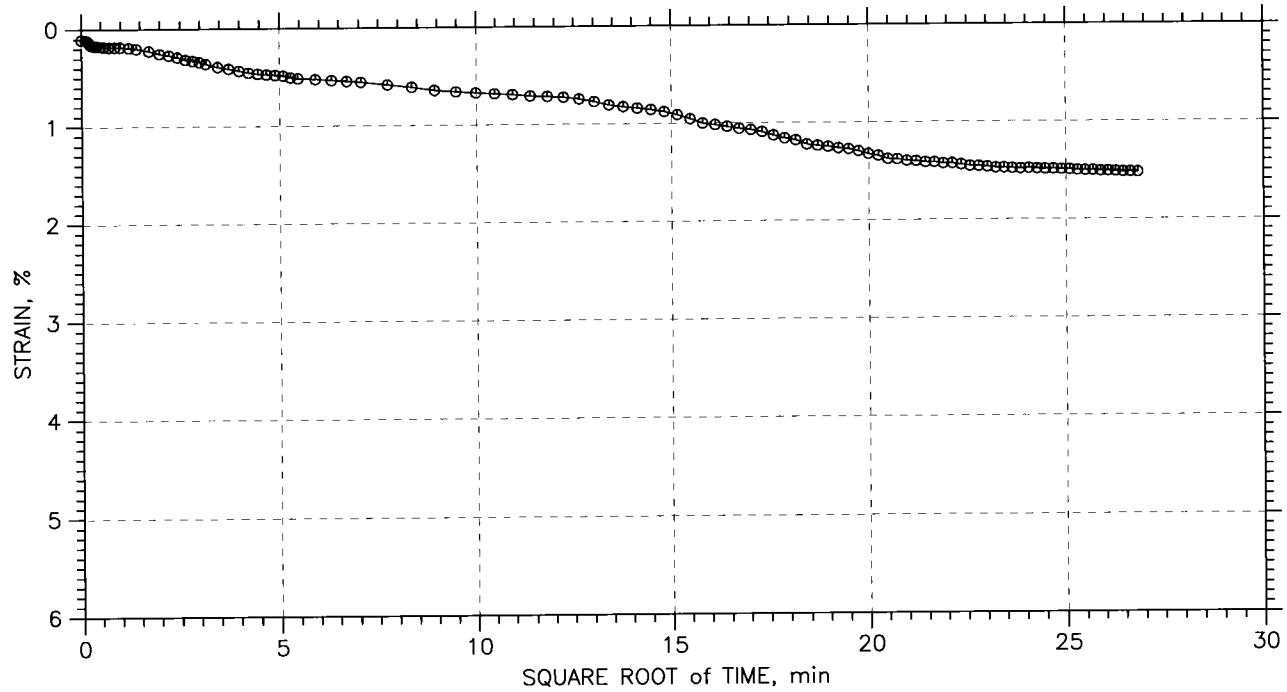
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 10. psf





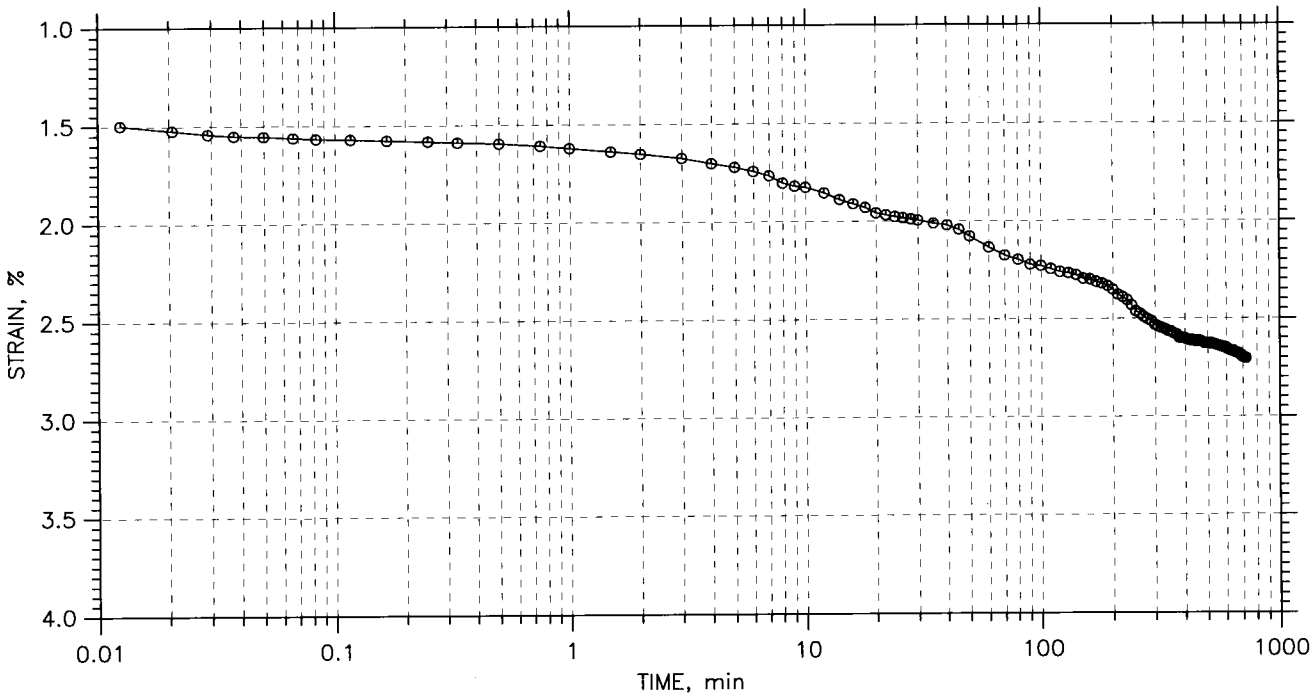
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

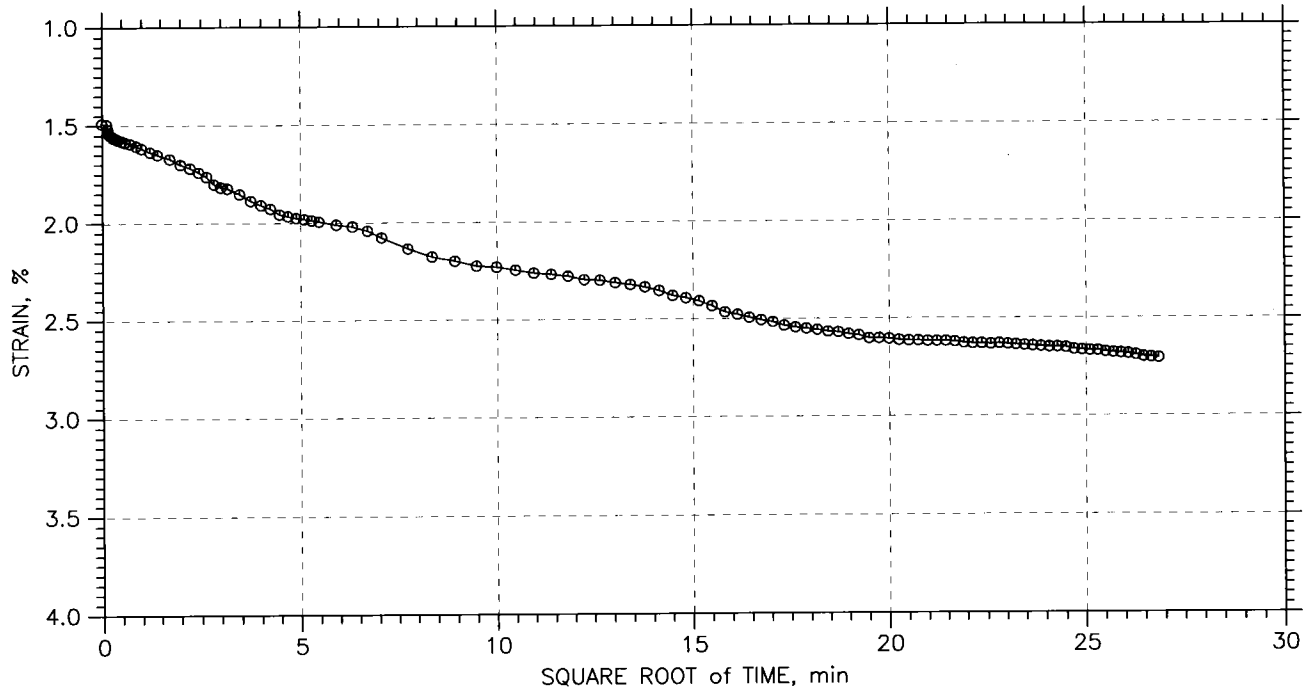
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 20. psf





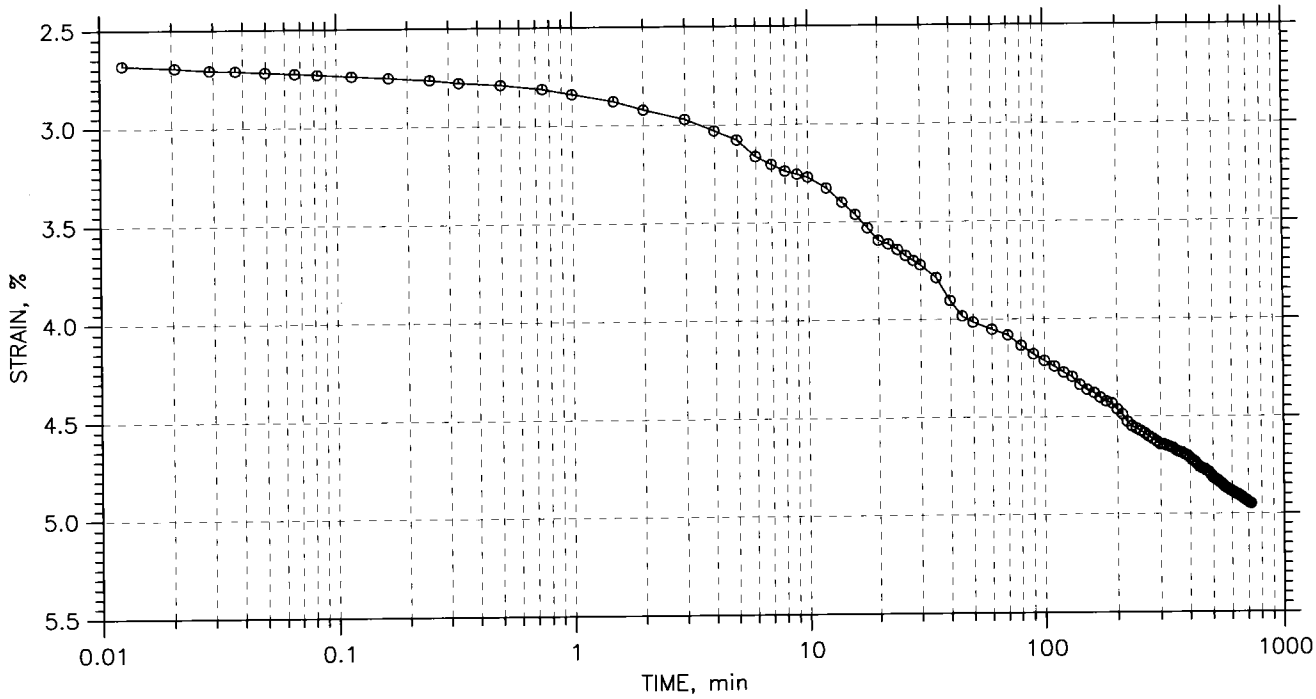
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

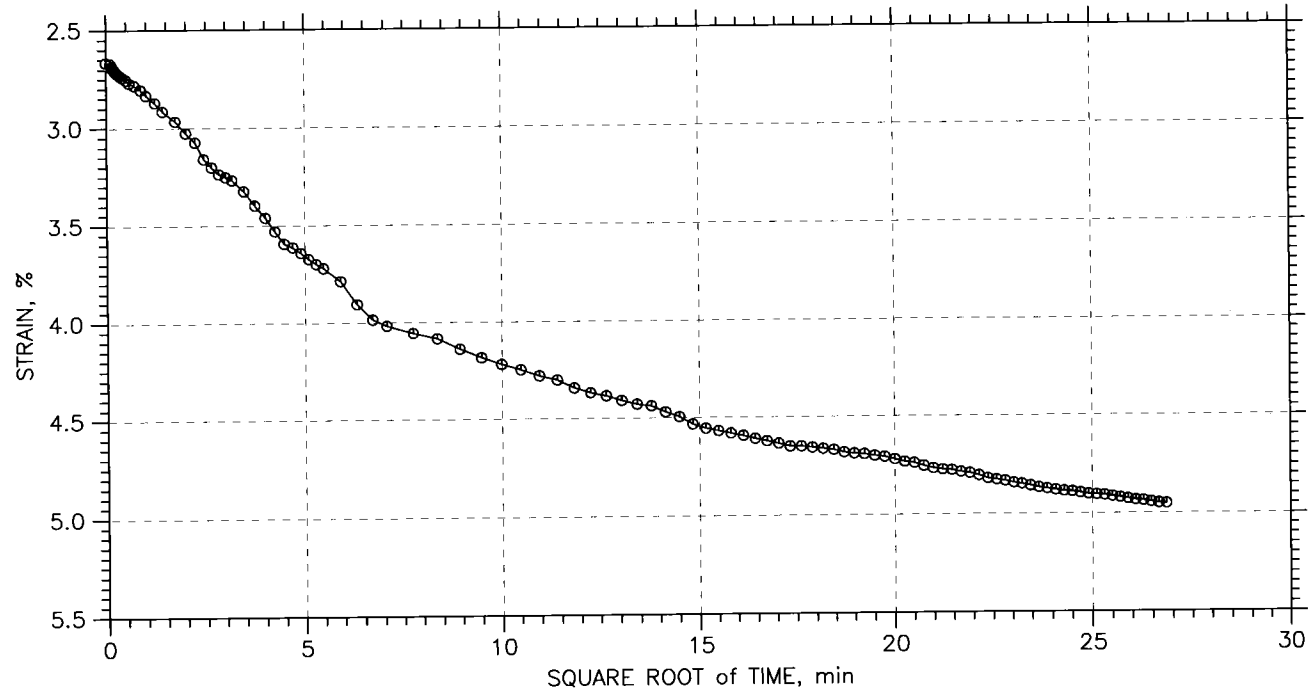
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 40. psf





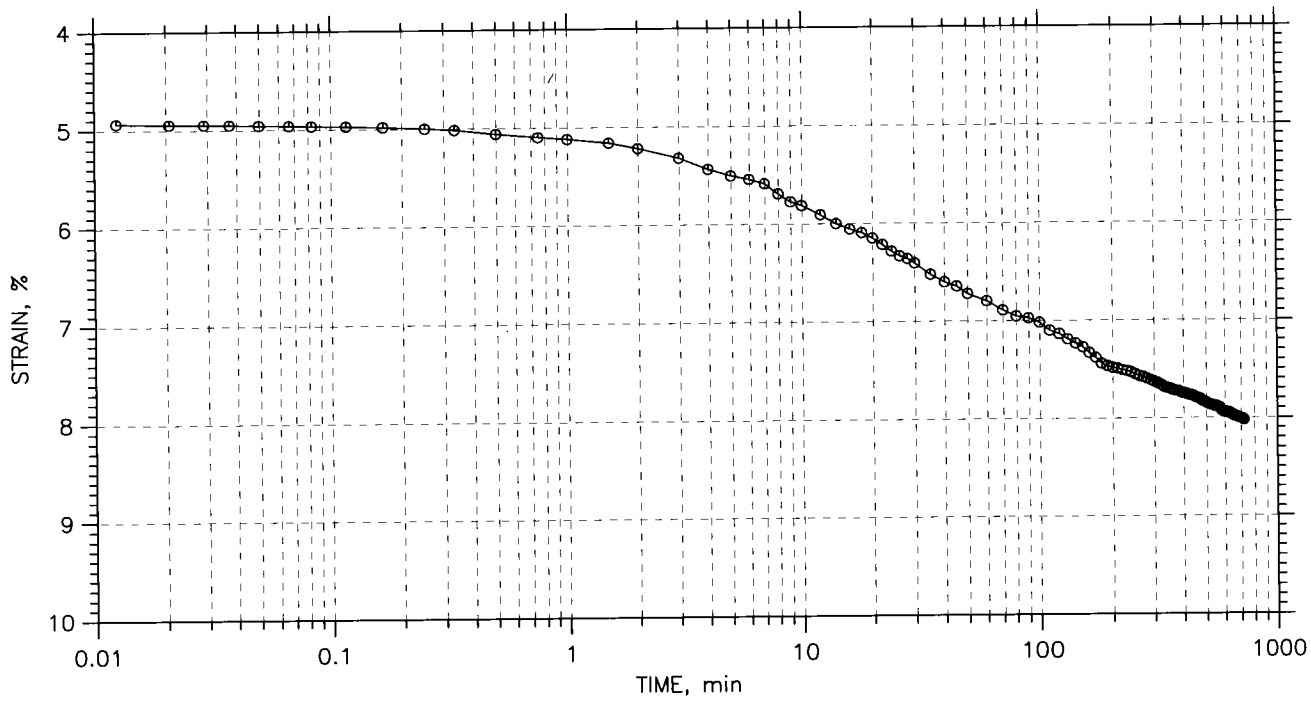
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

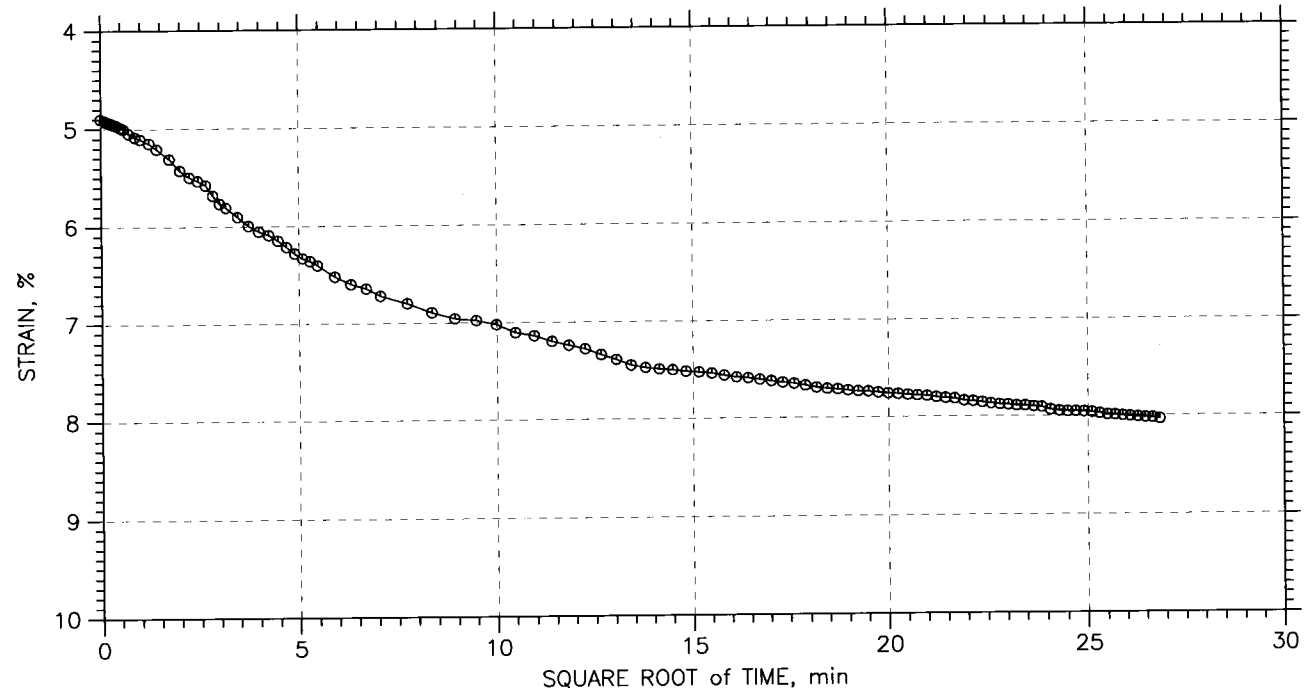
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 80. psf





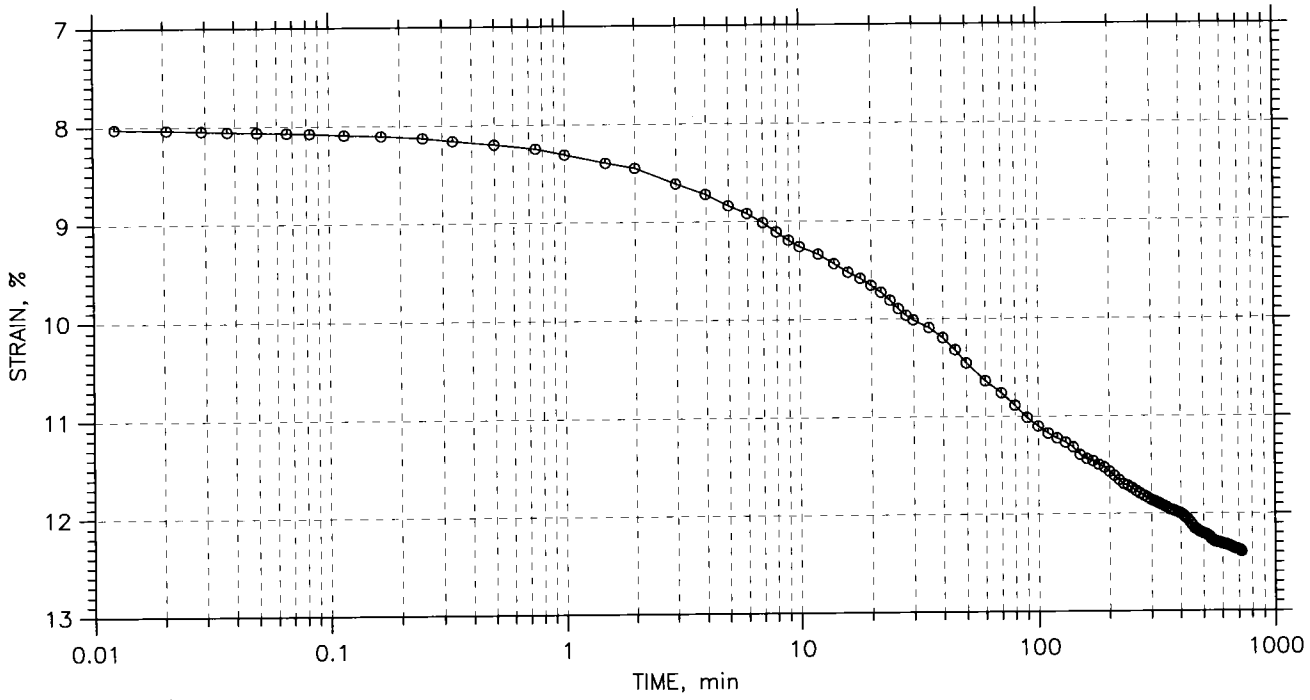
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

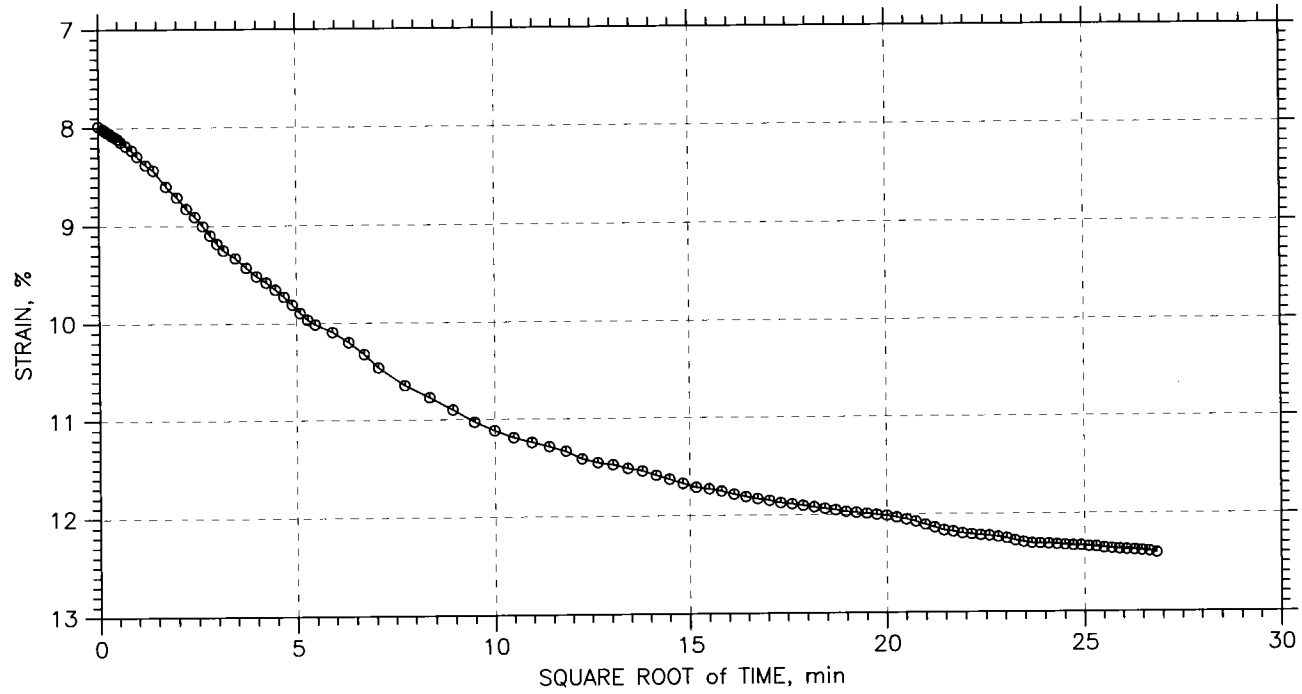
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 160. psf





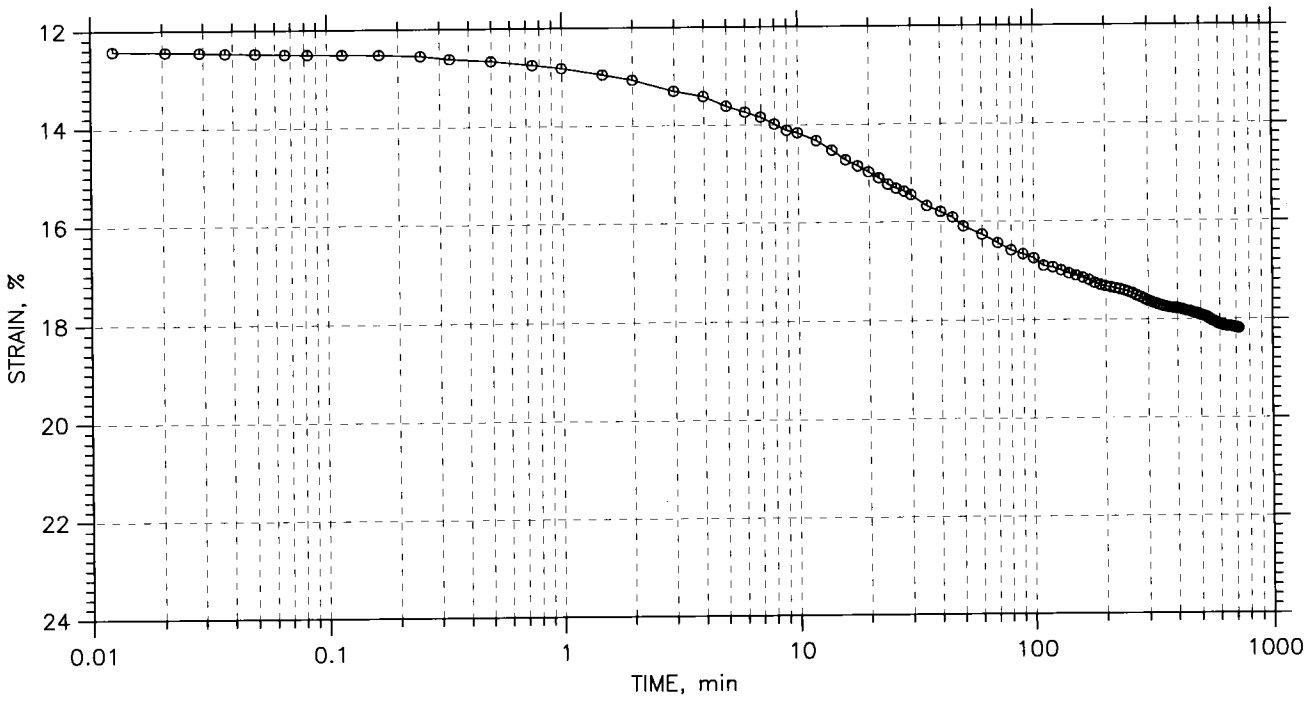
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

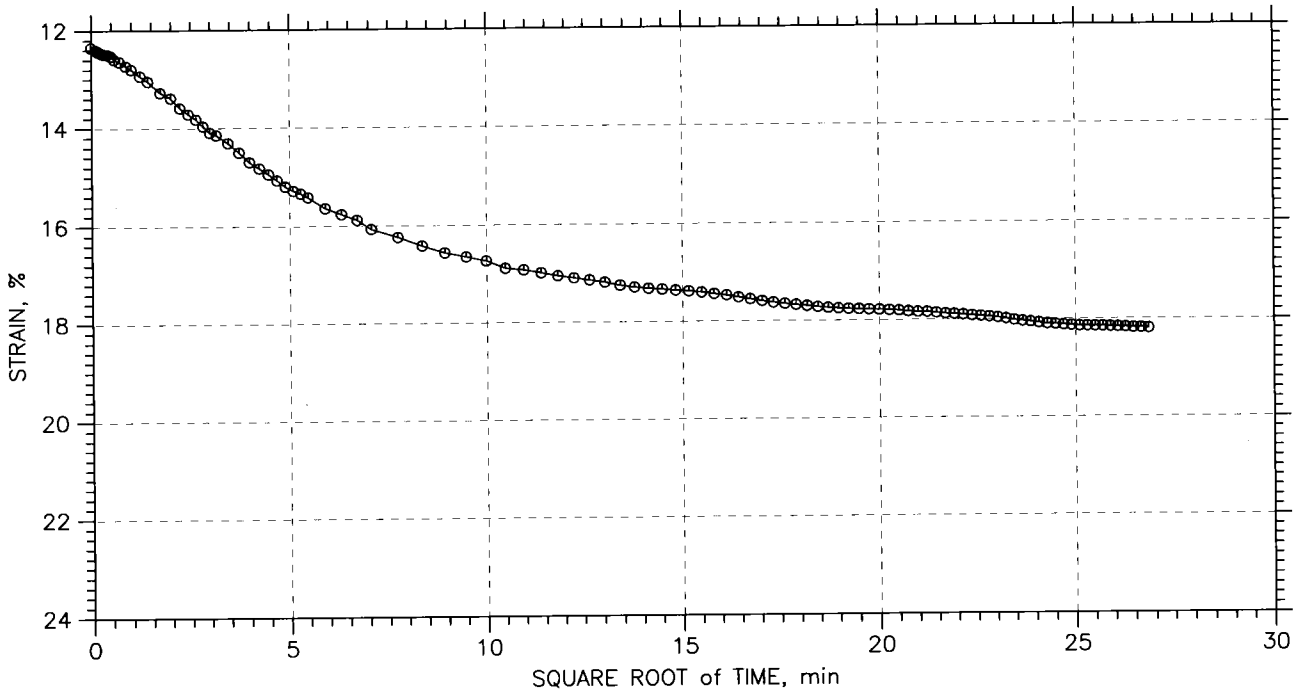
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 320. psf





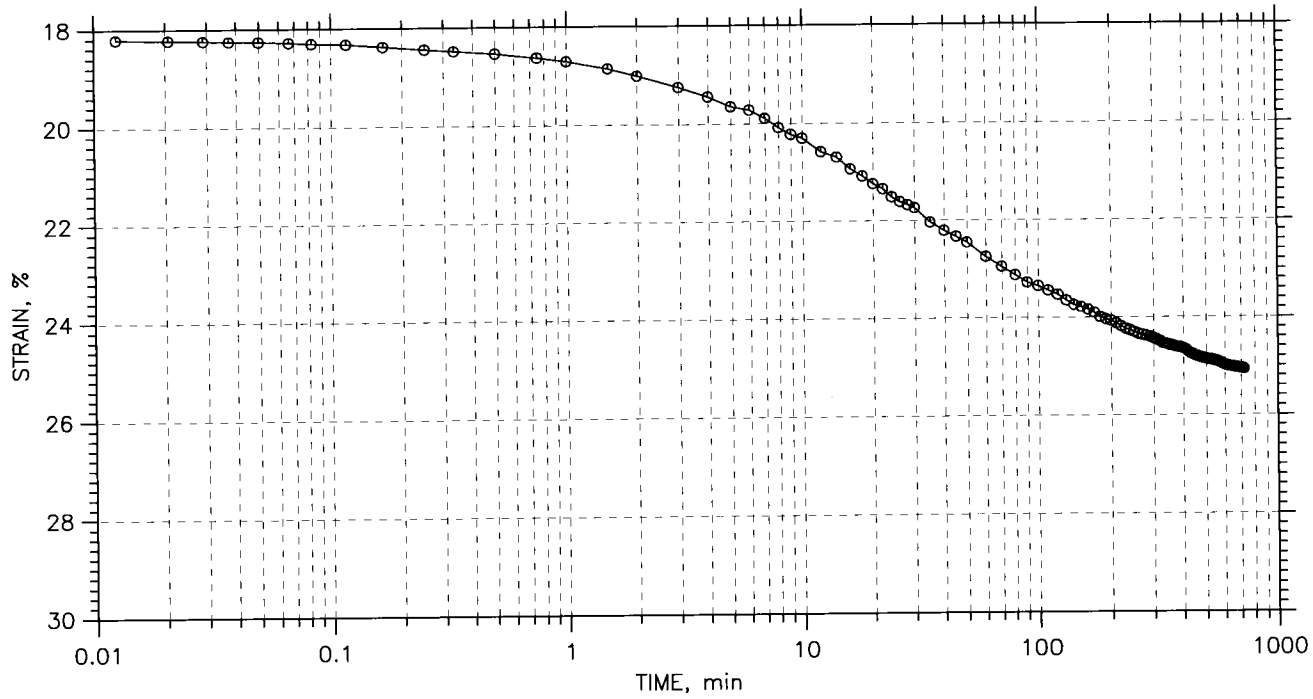
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

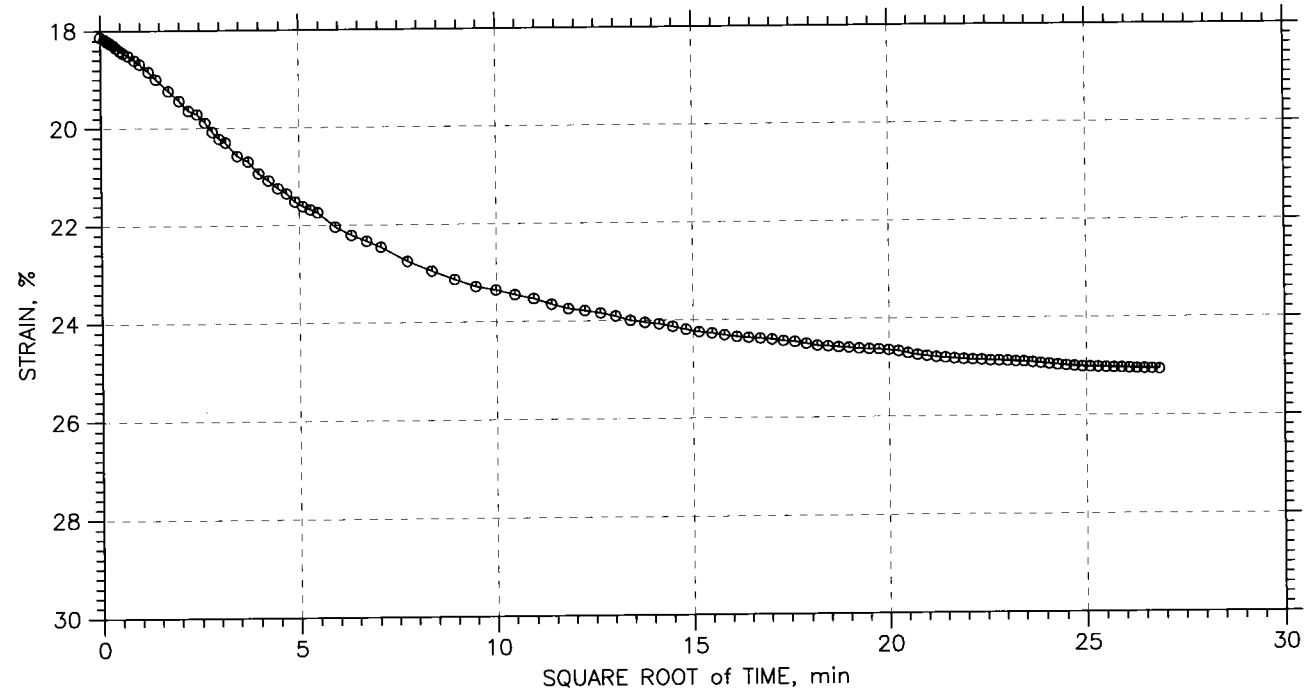
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 640. psf





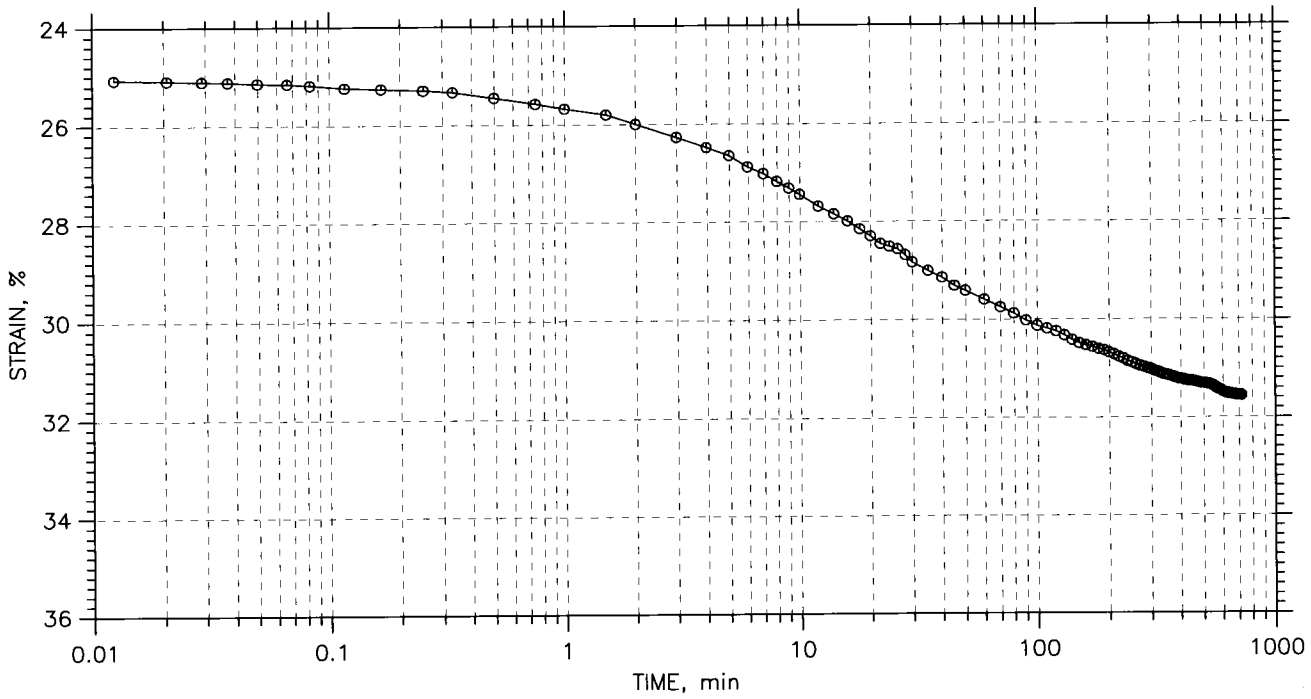
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

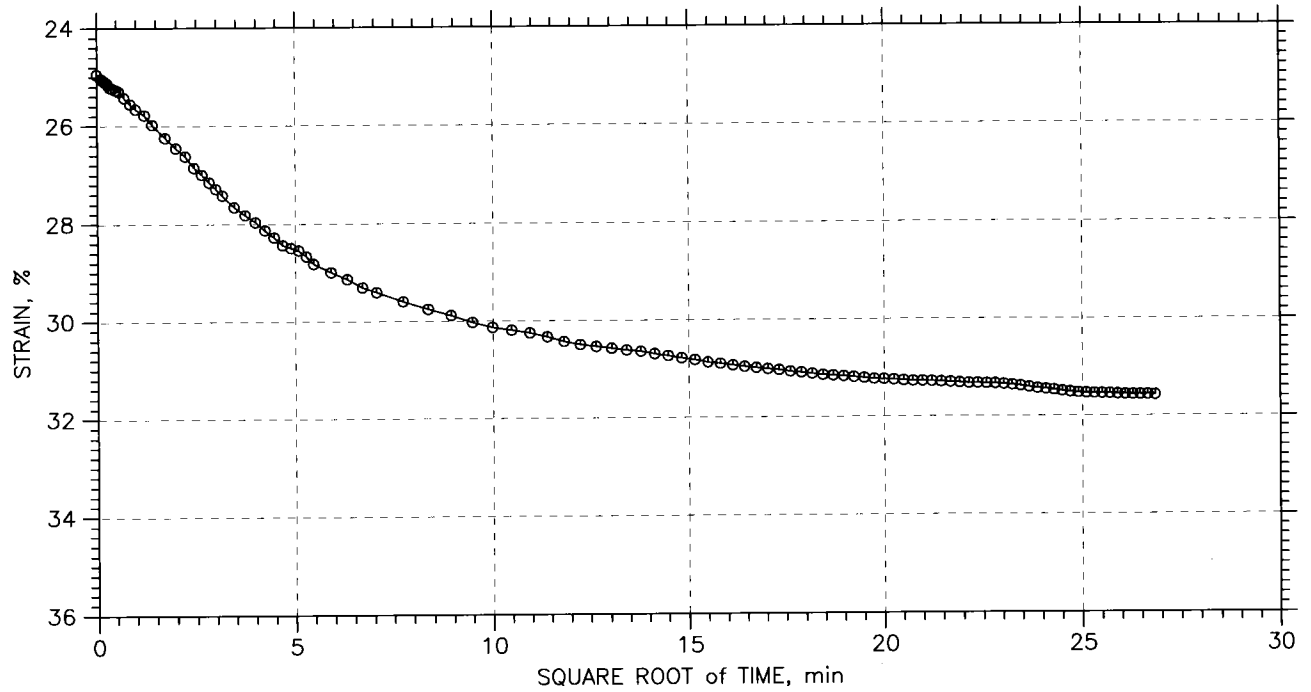
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 1280. psf





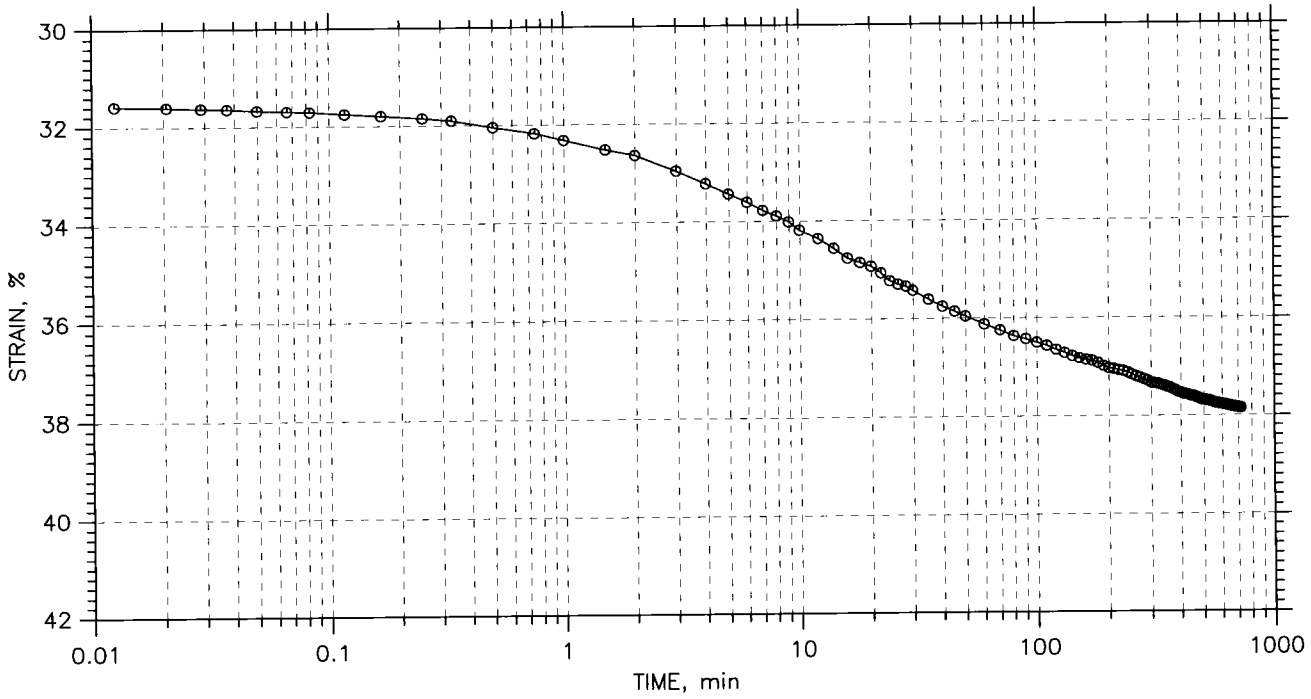
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

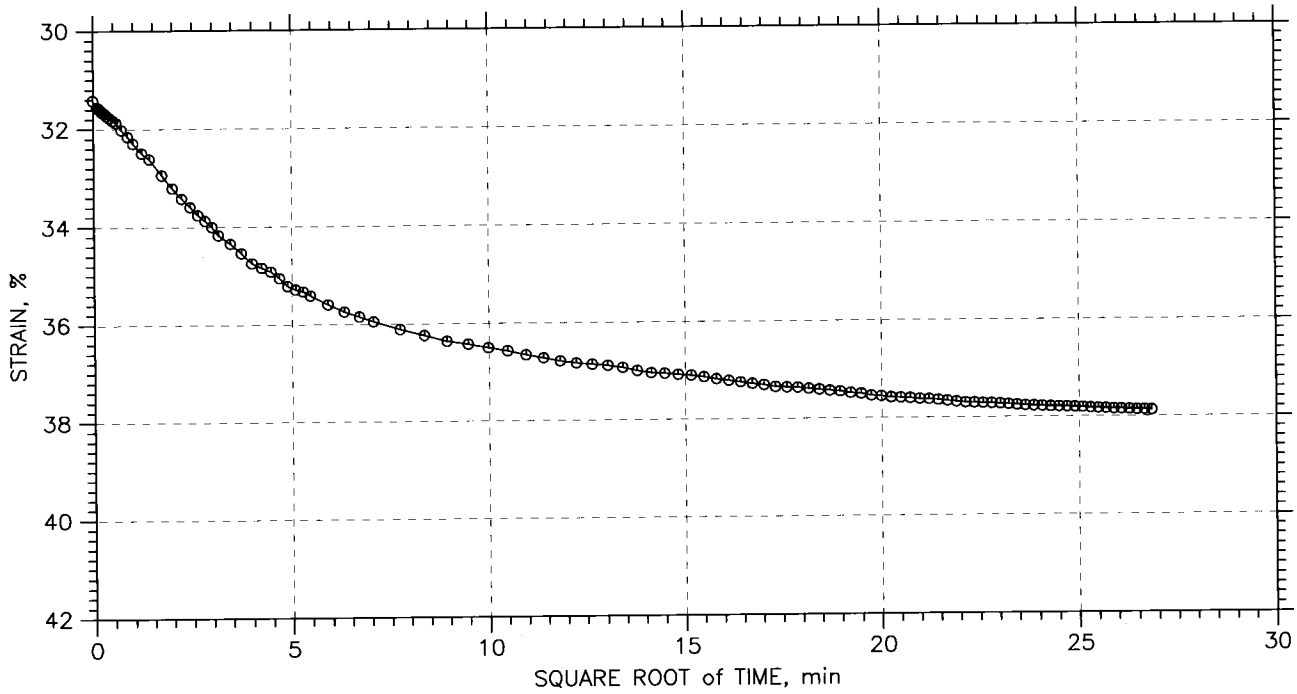
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 2560. psf





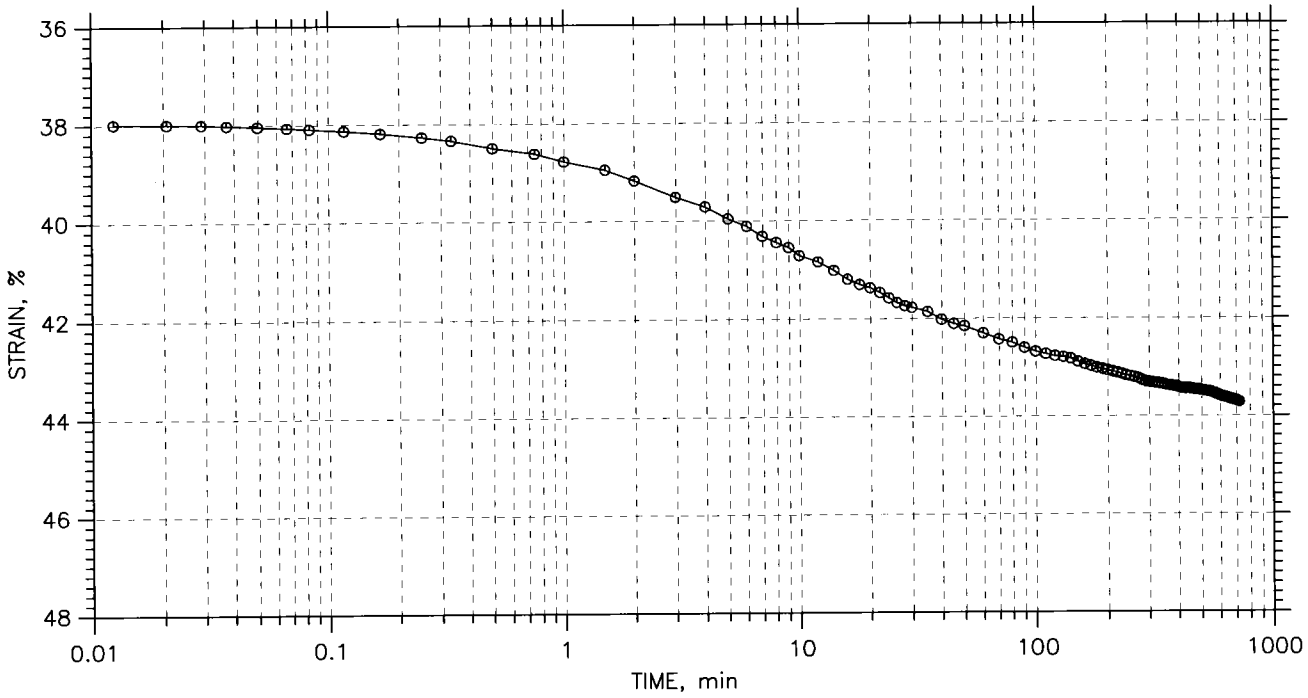
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

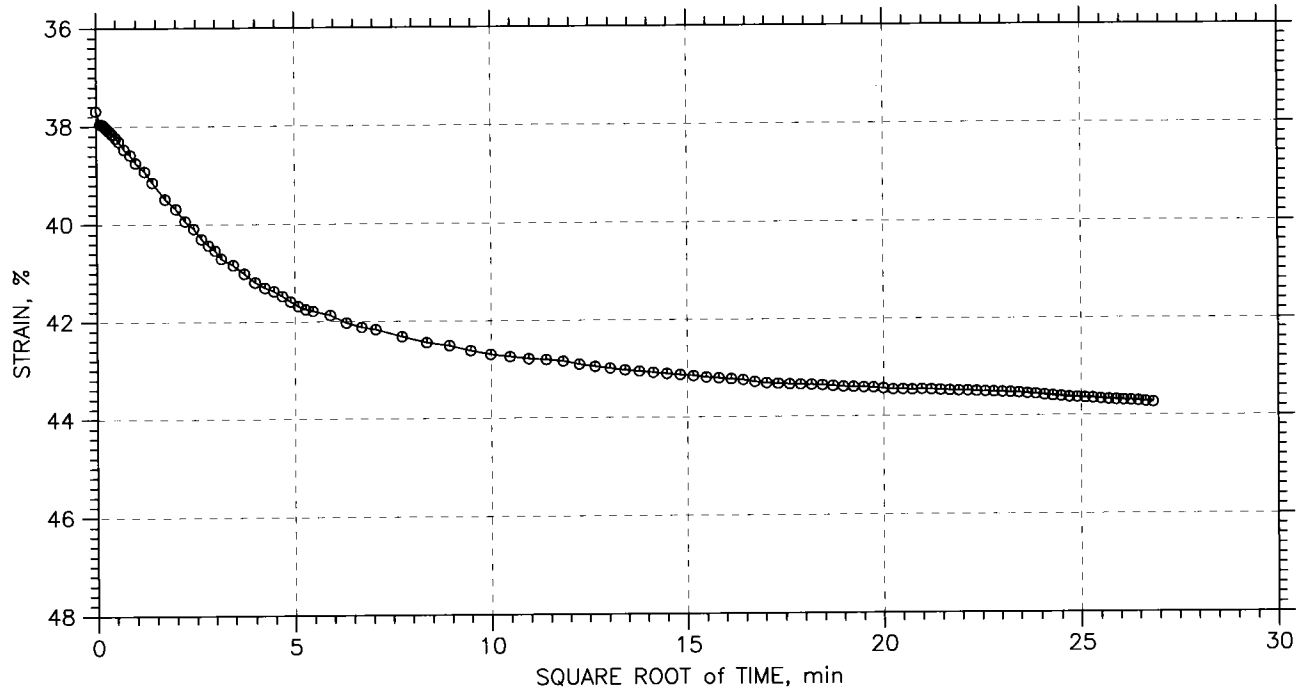
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 5120. psf





GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

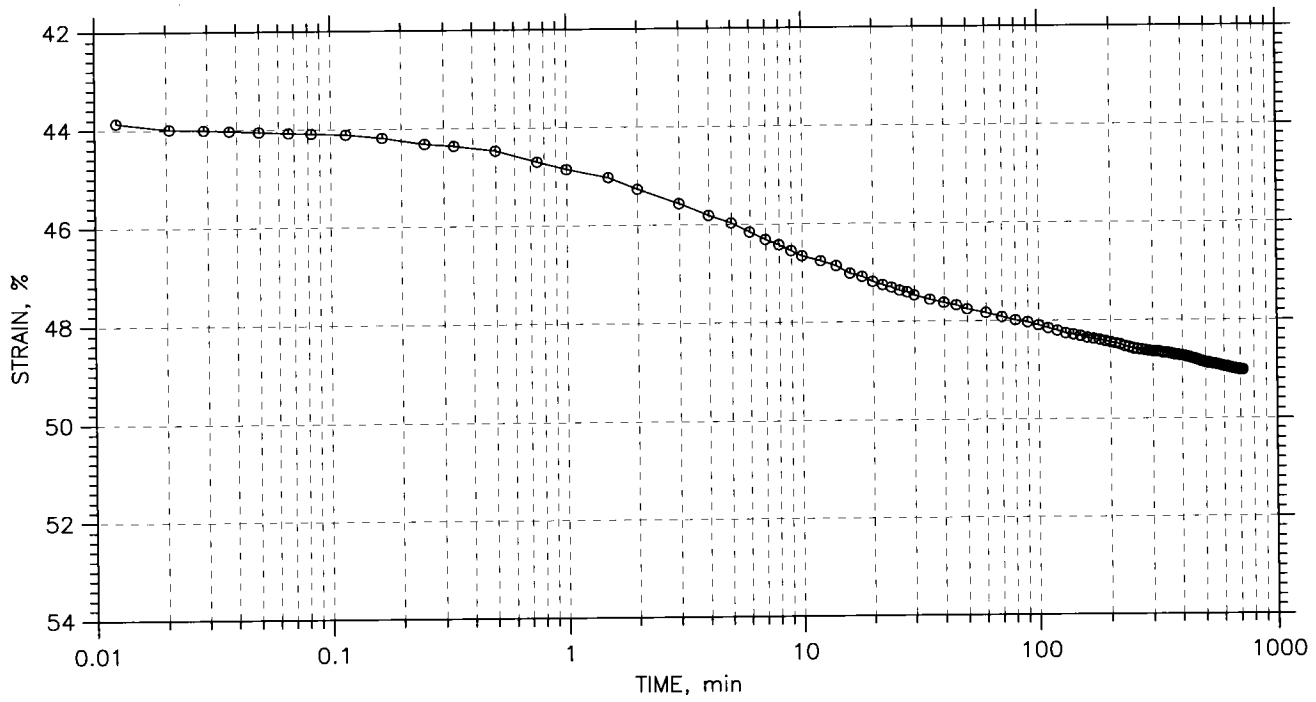
Mon, 24-AUG-2009 09:52:22

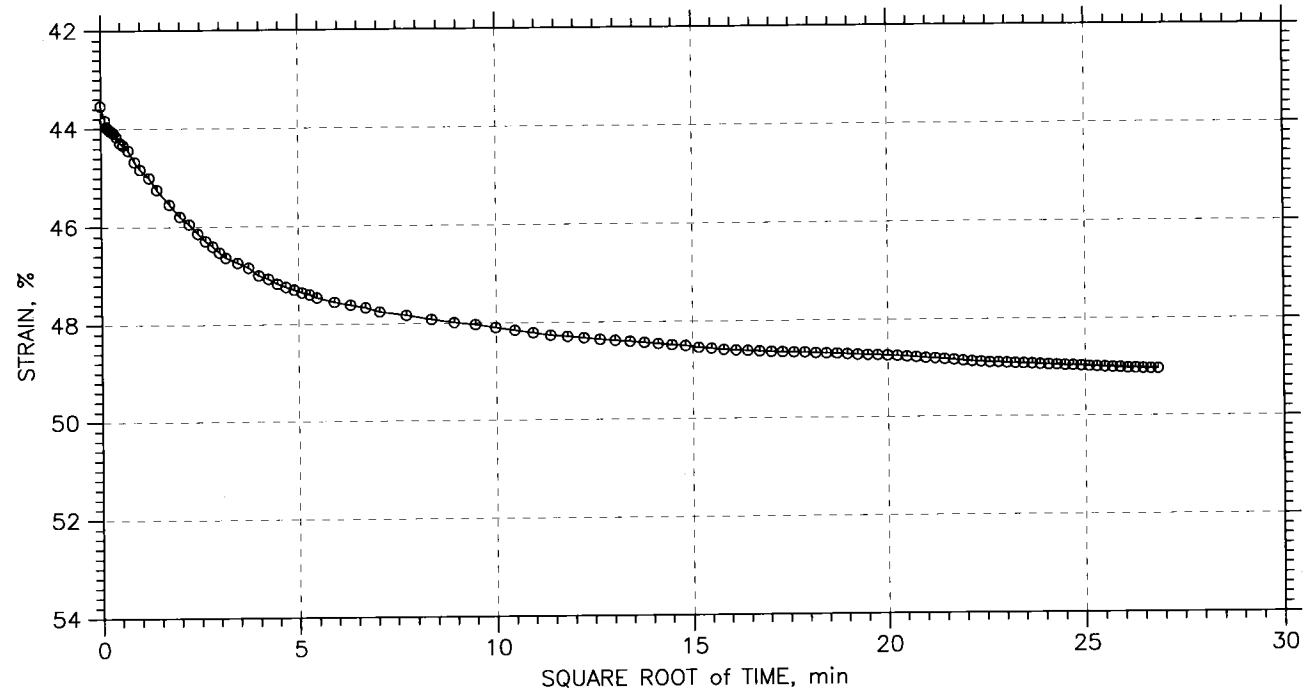
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 10240 psf





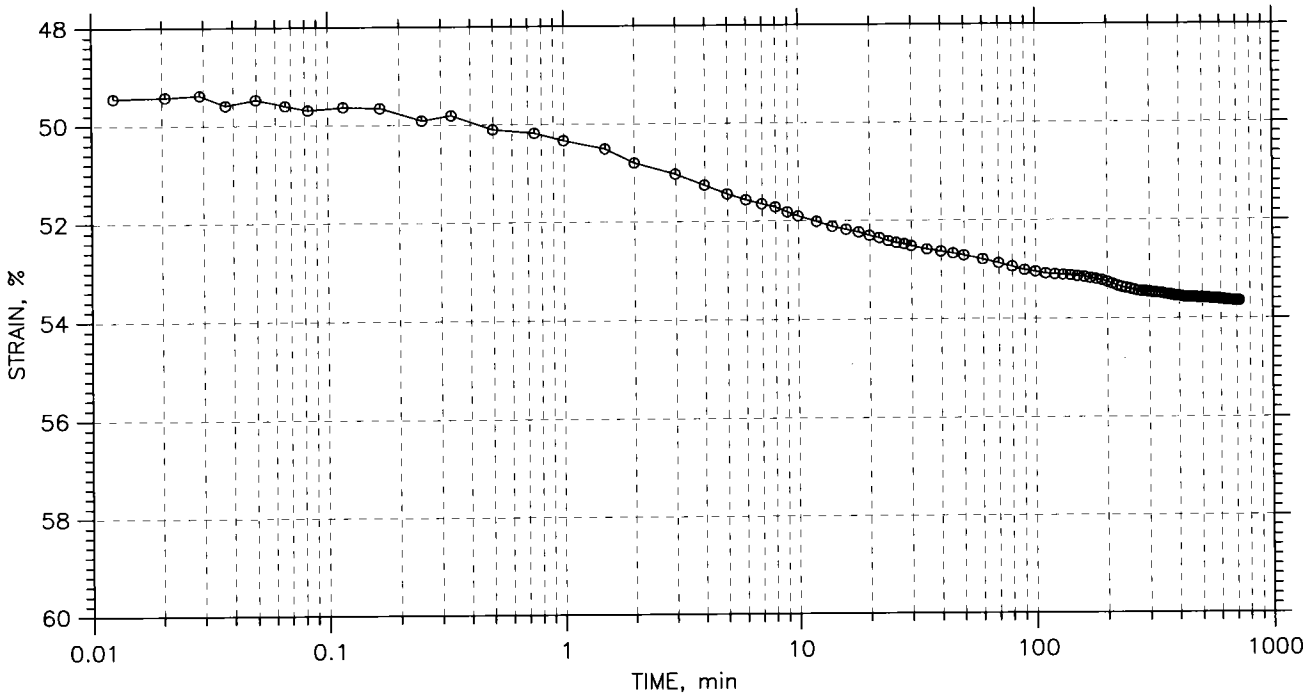
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

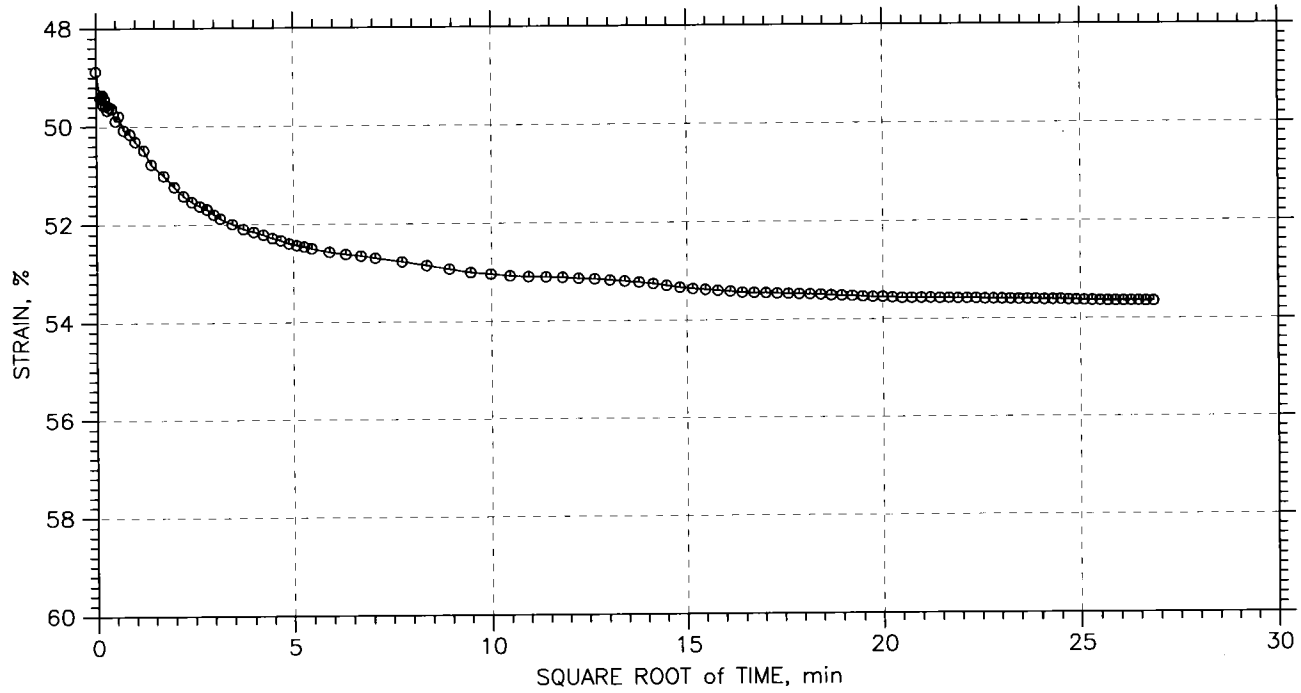
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 20480 psf

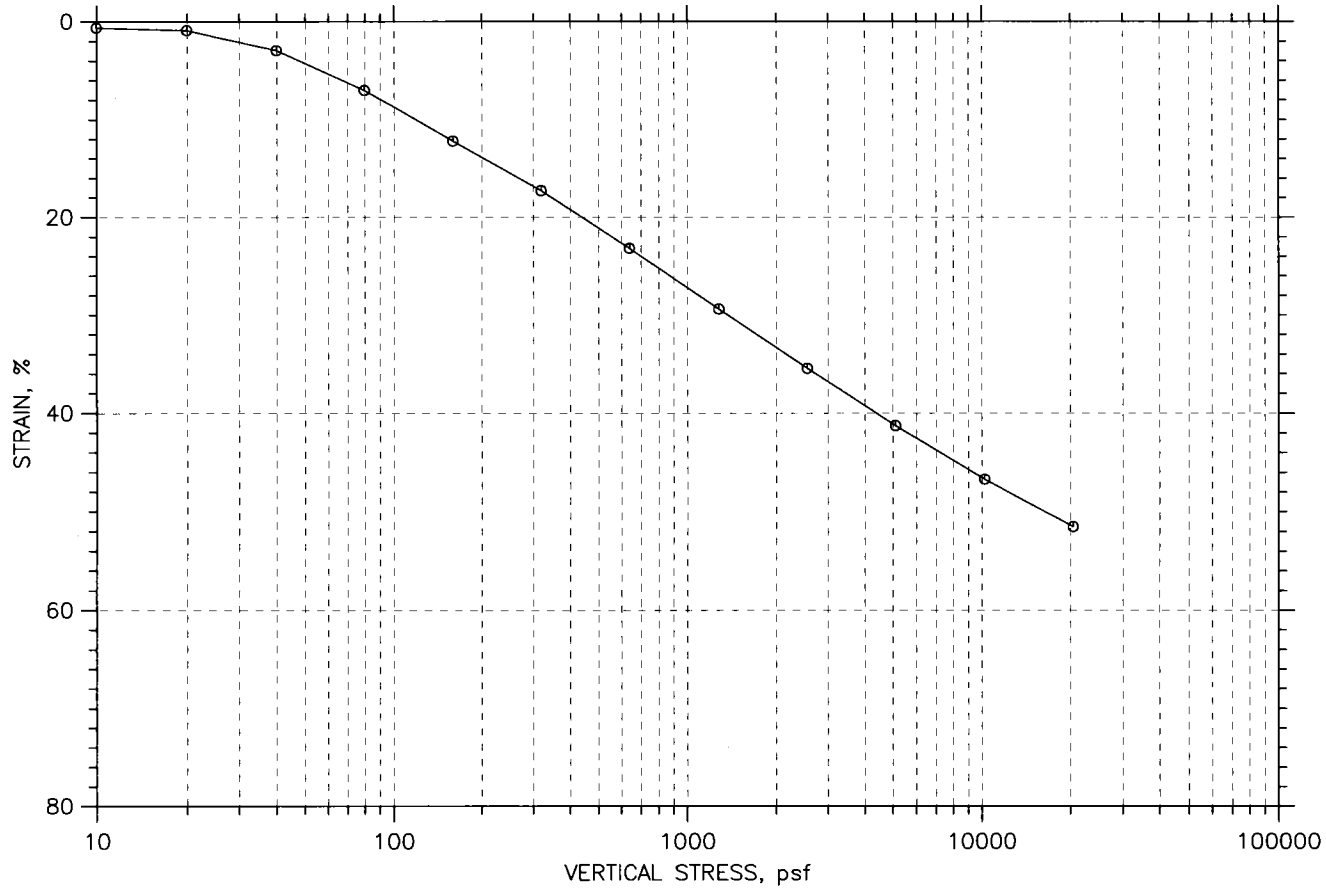


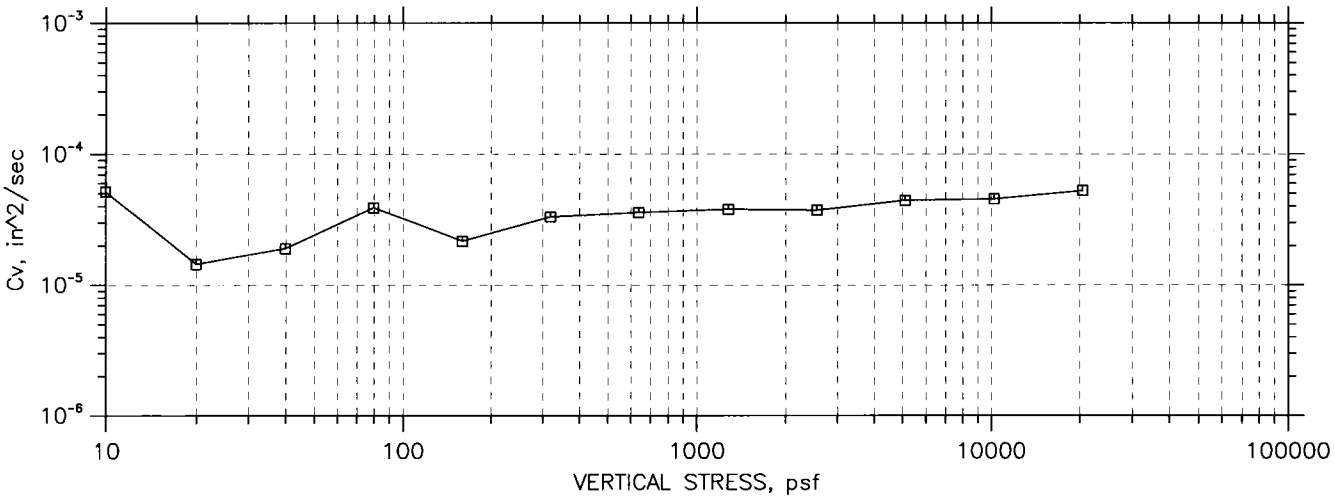


GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 33-1	Test Date: 08/11/09	Depth: ---
	Test No.: C-2	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT

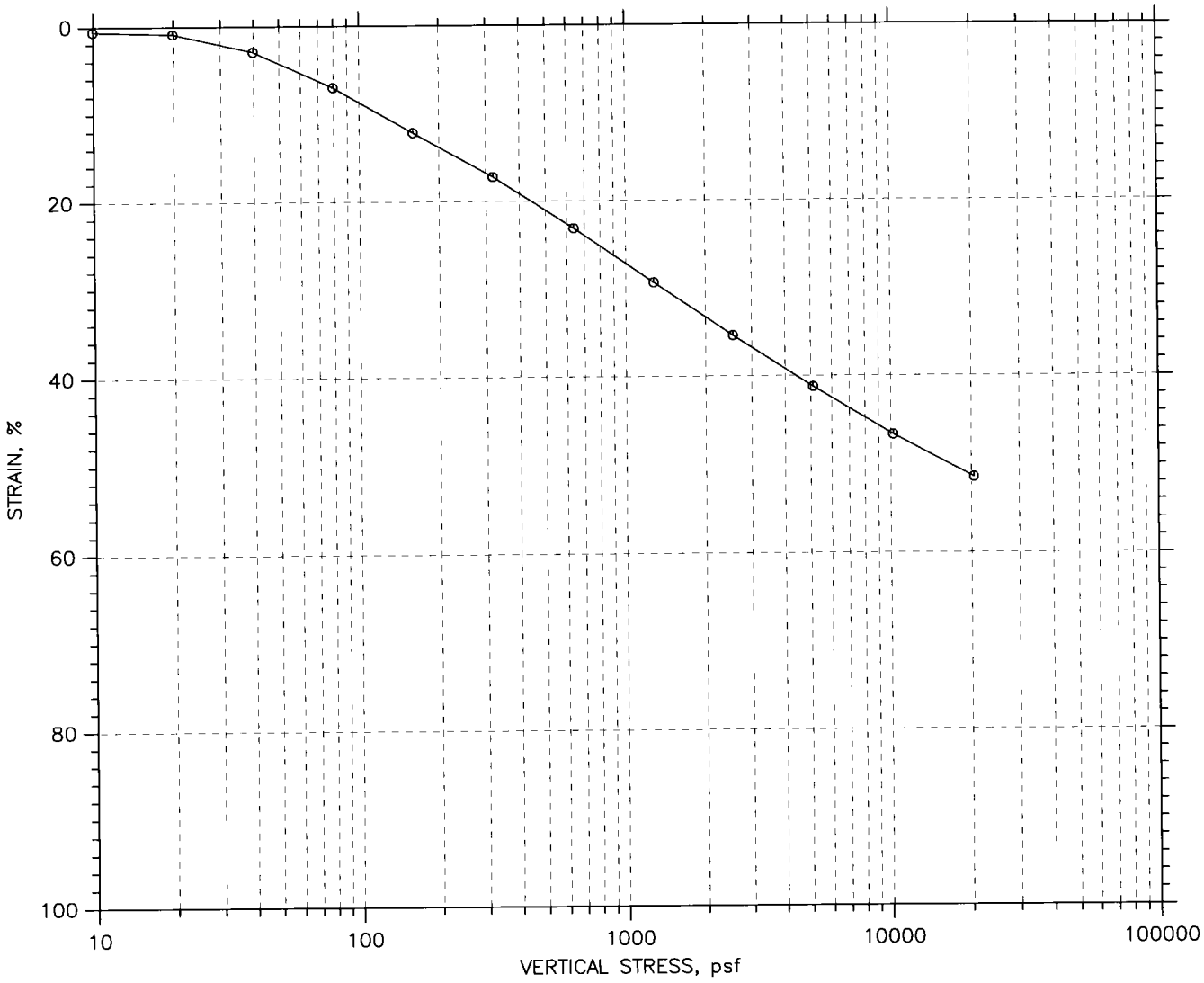




GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

CONSOLIDATION TEST DATA

SUMMARY REPORT



					Before Test	After Test
Overburden Pressure: ---				Water Content, %	111.73	36.50
Preconsolidation Pressure: ---				Dry Unit Weight, pcf	42.82	88.5
Compression Index: ---				Saturation, %	99.98	100.00
Diameter: 1.91 in		Height: 1.1 in		Void Ratio	3.28	1.07
LL: ---	PL: ---	PI: ---	GS: 2.94			

GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 36-1
Test No.: C-3

Location: Boston, MA
Tested By: md
Test Date: 08/12/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System E

Estimated Specific Gravity: 2.94
Initial Void Ratio: 3.28
Final Void Ratio: 1.07

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.10 in
Specimen Diameter: 1.91 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	4654	RING		3829
Wt. Container + Wet Soil, gm	434.05	394.89	368.24	56.59
Wt. Container + Dry Soil, gm	224.51	355.31	355.31	43.66
Wt. Container, gm	8.65	319.88	319.88	8.24
Wt. Dry Soil, gm	215.86	35.427	35.427	35.42
Water Content, %	97.07	111.73	36.50	36.50
Void Ratio	---	3.28	1.07	---
Degree of Saturation, %	---	99.98	100.00	---
Dry Unit Weight, pcf	---	42.822	88.501	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 36-1
Test No.: C-3

Location: Boston, MA
Tested By: md
Test Date: 08/12/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System E

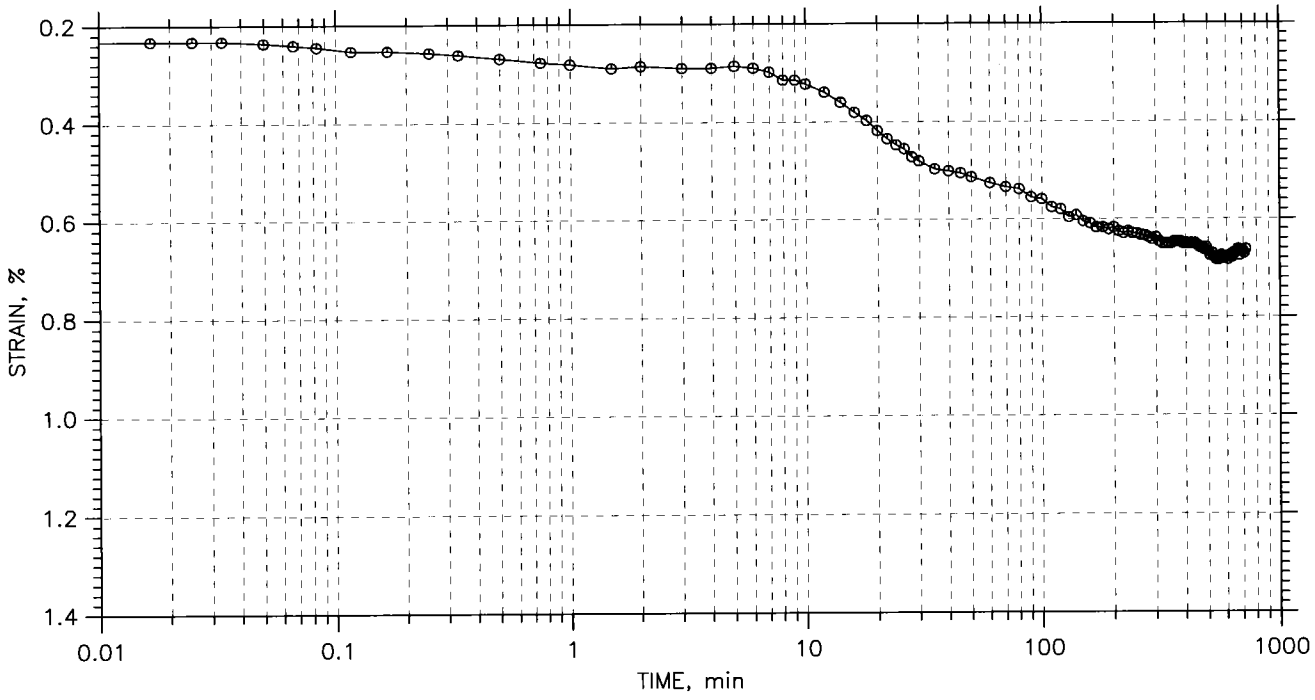
	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	10	0.007297	3.255	0.66	19.4	0.0	5.09e-005	0.00e+000	5.09e-005
2	20	0.01024	3.244	0.93	68.7	0.0	1.43e-005	0.00e+000	1.43e-005
3	40	0.03292	3.155	2.99	50.9	0.0	1.88e-005	0.00e+000	1.88e-005
4	80	0.07767	2.981	7.06	23.4	0.0	3.84e-005	0.00e+000	3.84e-005
5	160	0.1344	2.760	12.22	32.4	43.7	2.51e-005	1.86e-005	2.14e-005
6	320	0.1899	2.544	17.27	24.6	19.5	2.94e-005	3.71e-005	3.28e-005
7	640	0.2548	2.291	23.17	18.2	17.6	3.48e-005	3.59e-005	3.53e-005
8	1.28e+003	0.3231	2.025	29.38	15.5	13.5	3.50e-005	3.99e-005	3.73e-005
9	2.56e+003	0.3896	1.766	35.42	13.0	11.7	3.51e-005	3.88e-005	3.68e-005
10	5.12e+003	0.454	1.516	41.27	9.3	8.0	4.06e-005	4.71e-005	4.36e-005
11	1.02e+004	0.5144	1.281	46.76	7.1	6.7	4.36e-005	4.62e-005	4.49e-005
12	2.05e+004	0.5678	1.073	51.61	4.9	5.0	5.19e-005	5.18e-005	5.19e-005

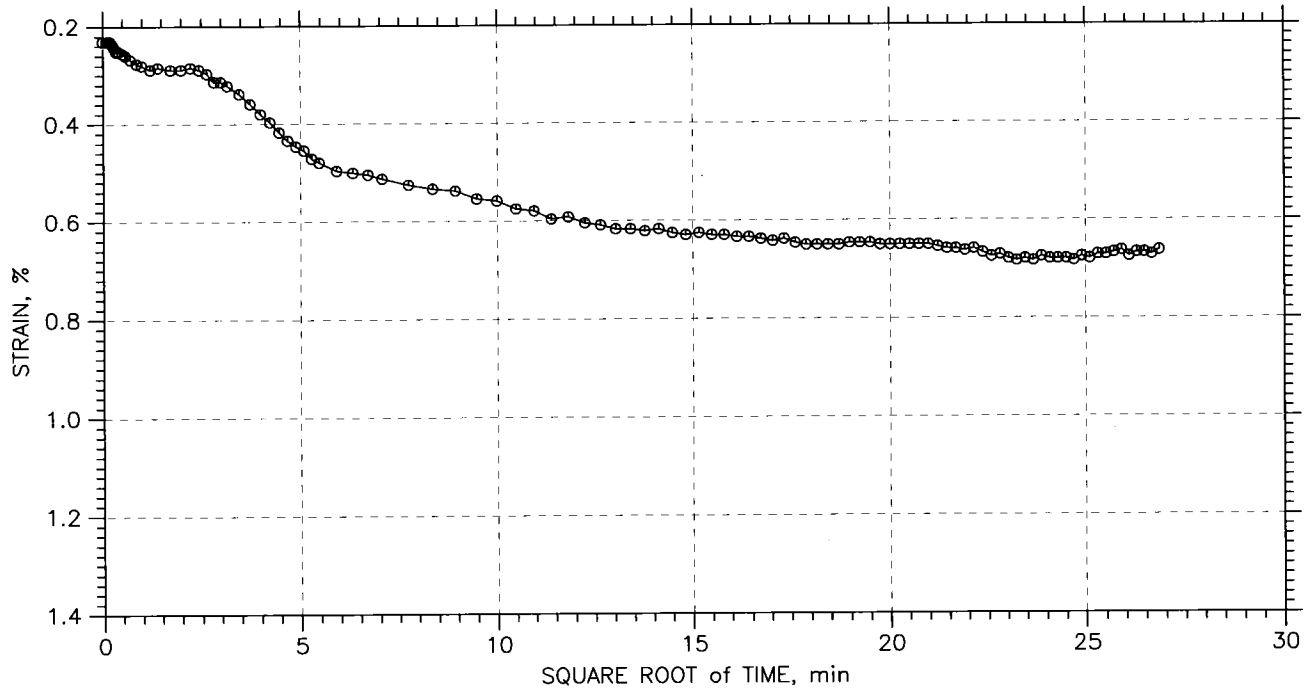
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 10. psf





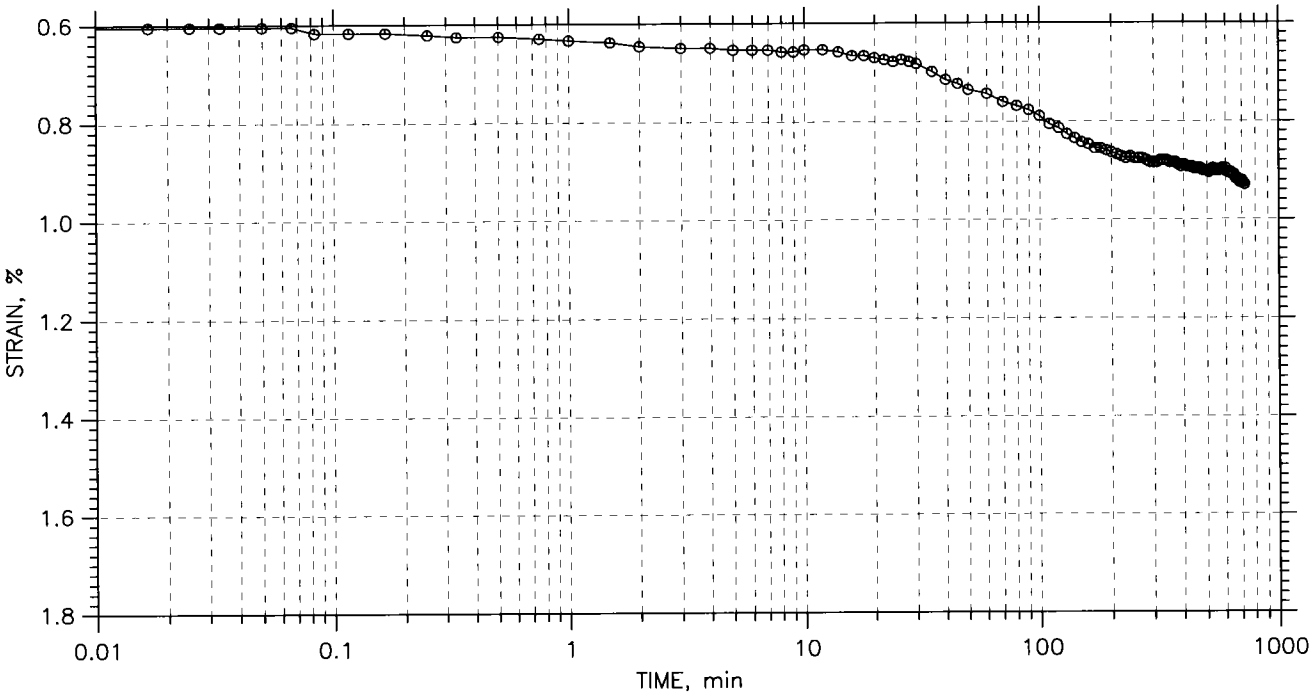
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

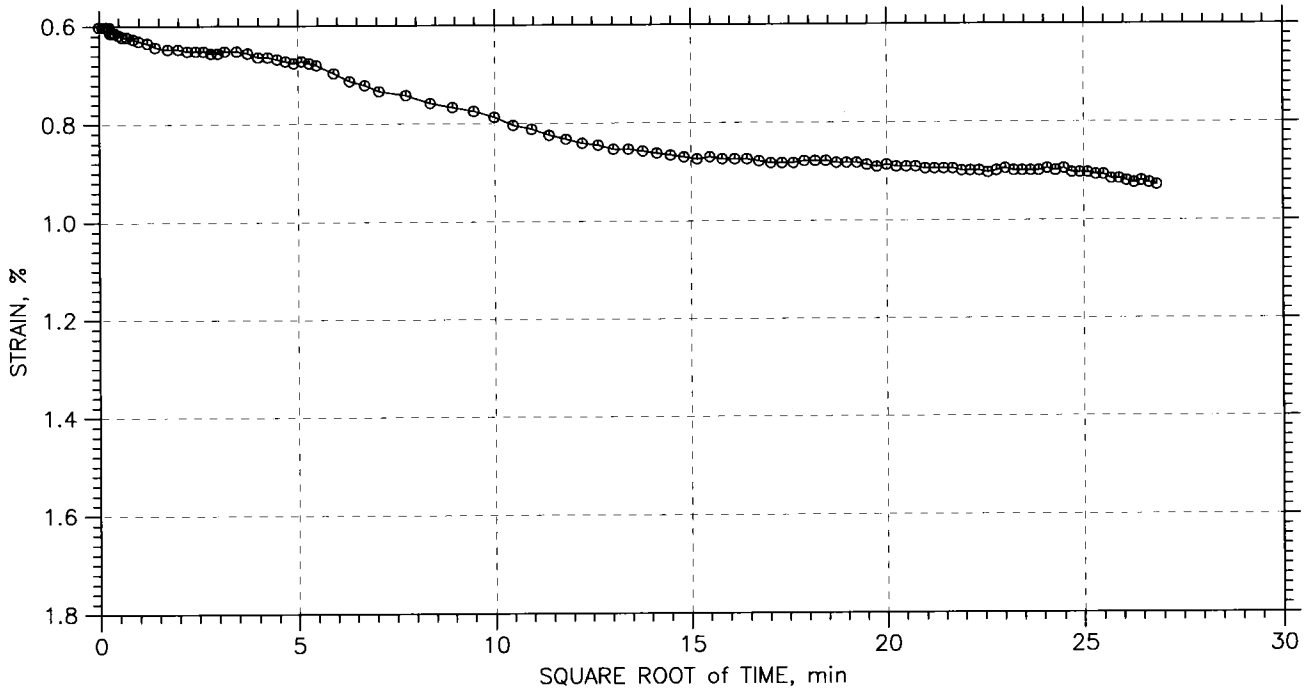
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 20. psf





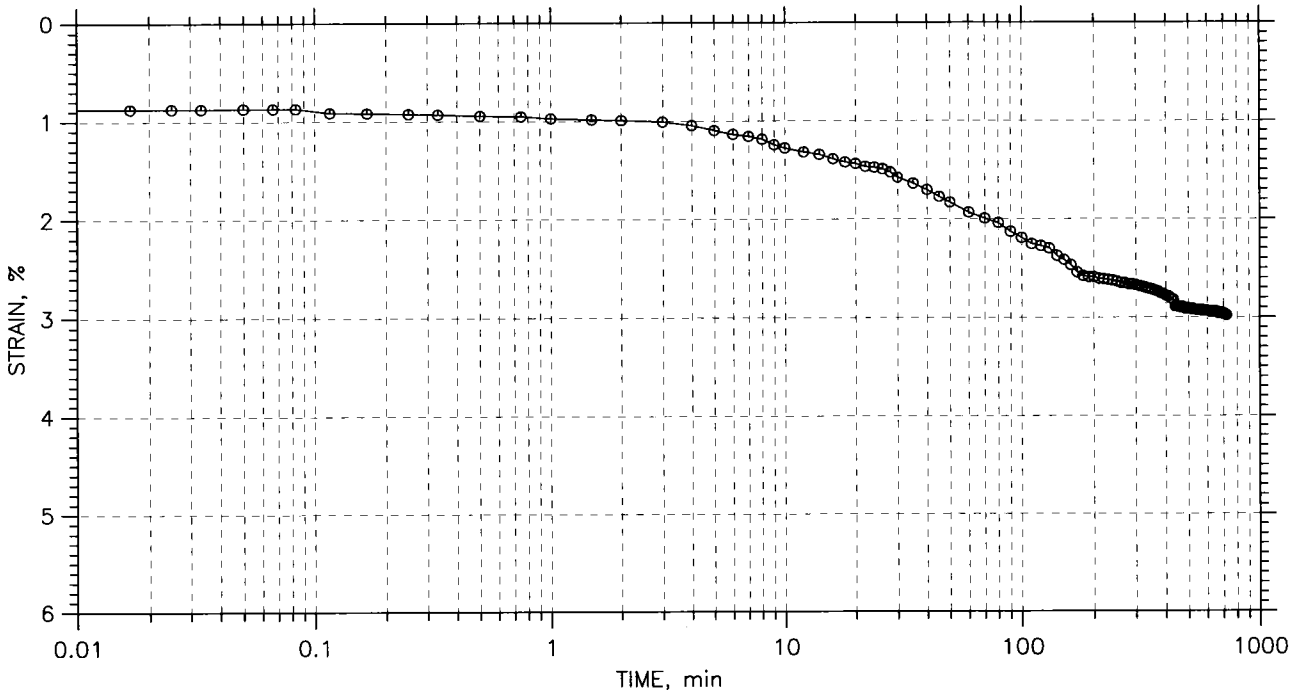
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

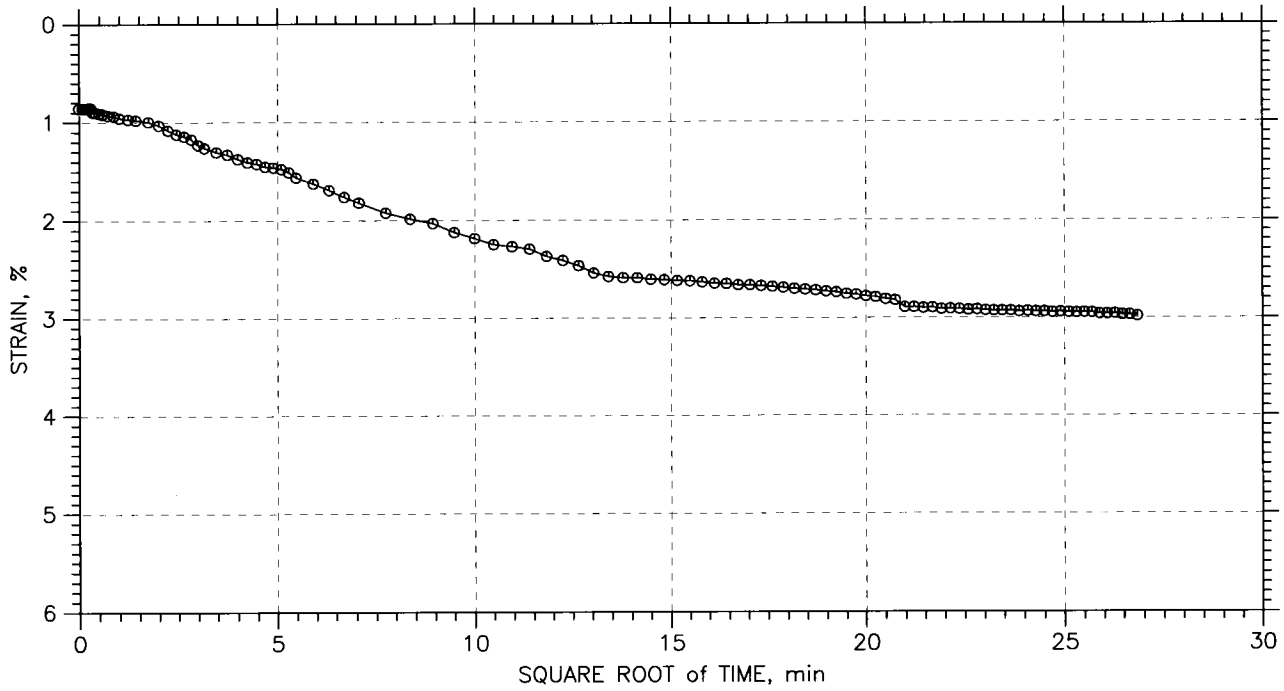
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 40. psf





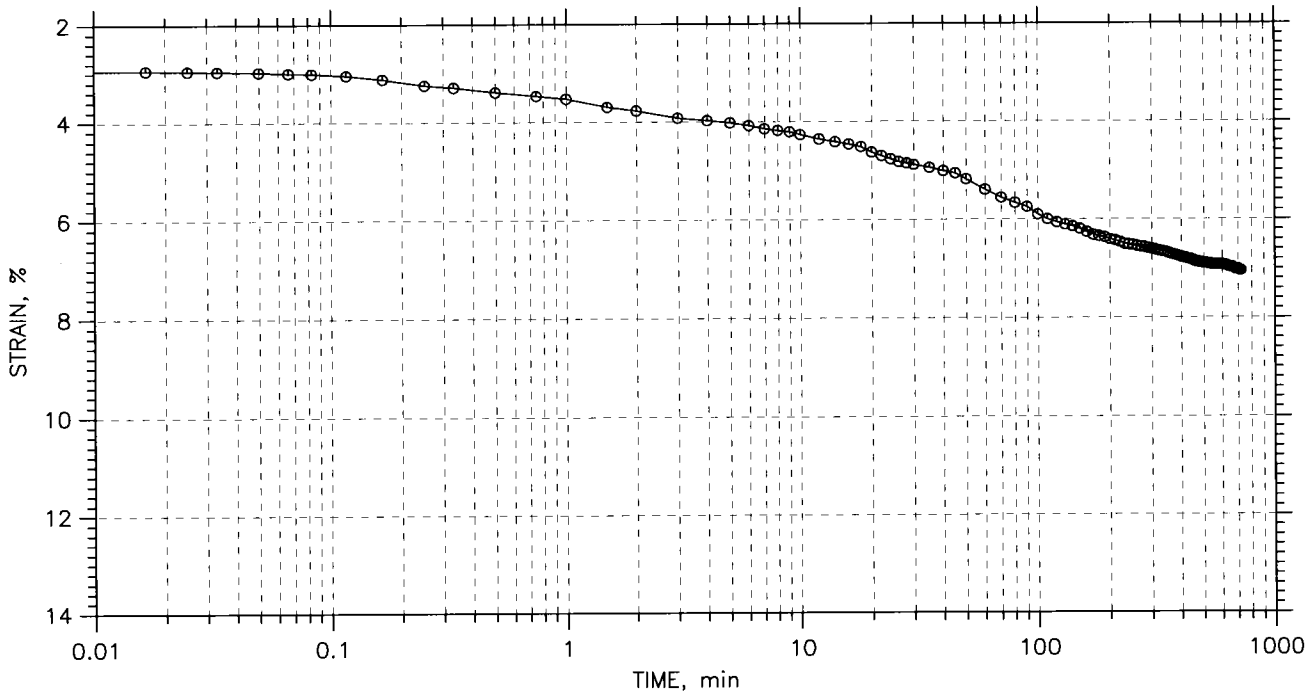
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

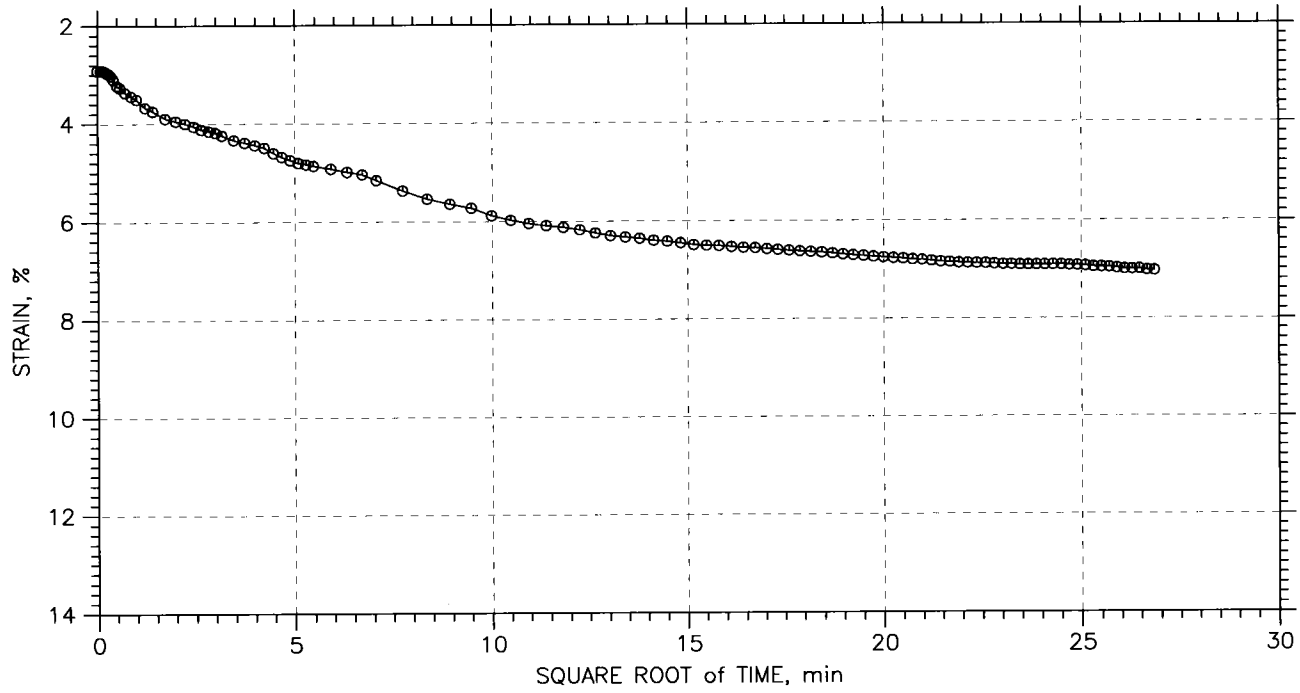
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 80. psf





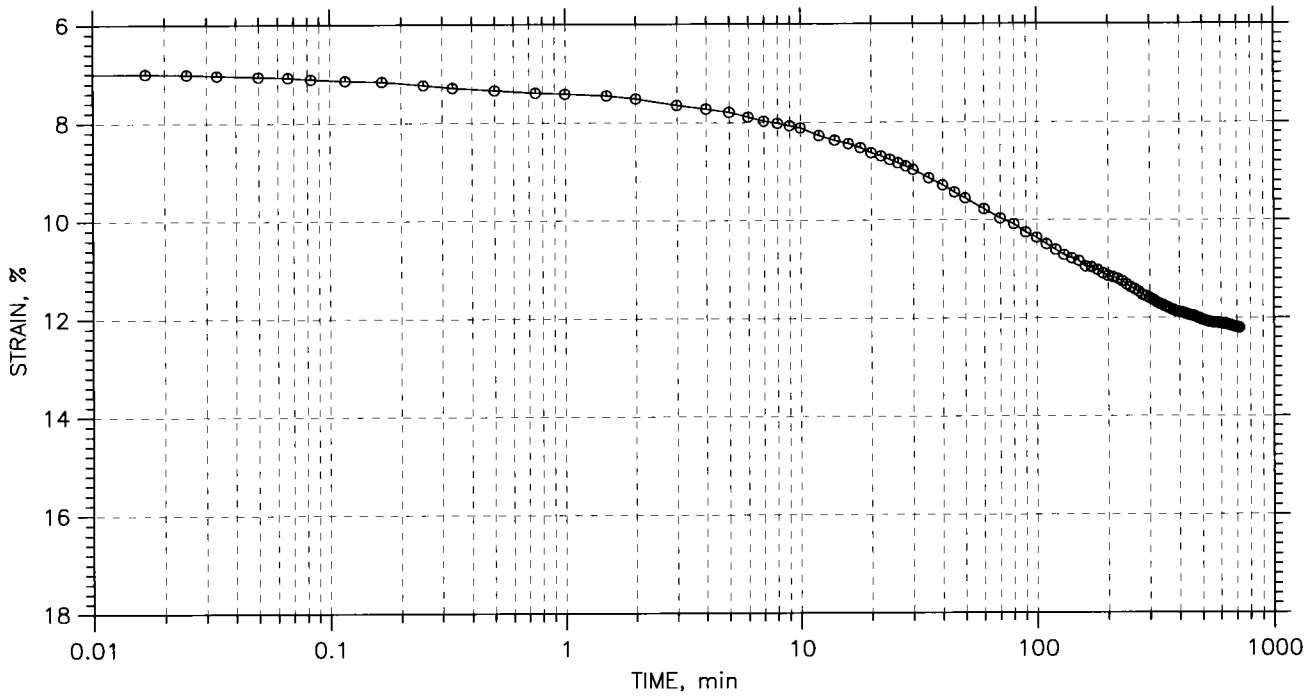
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

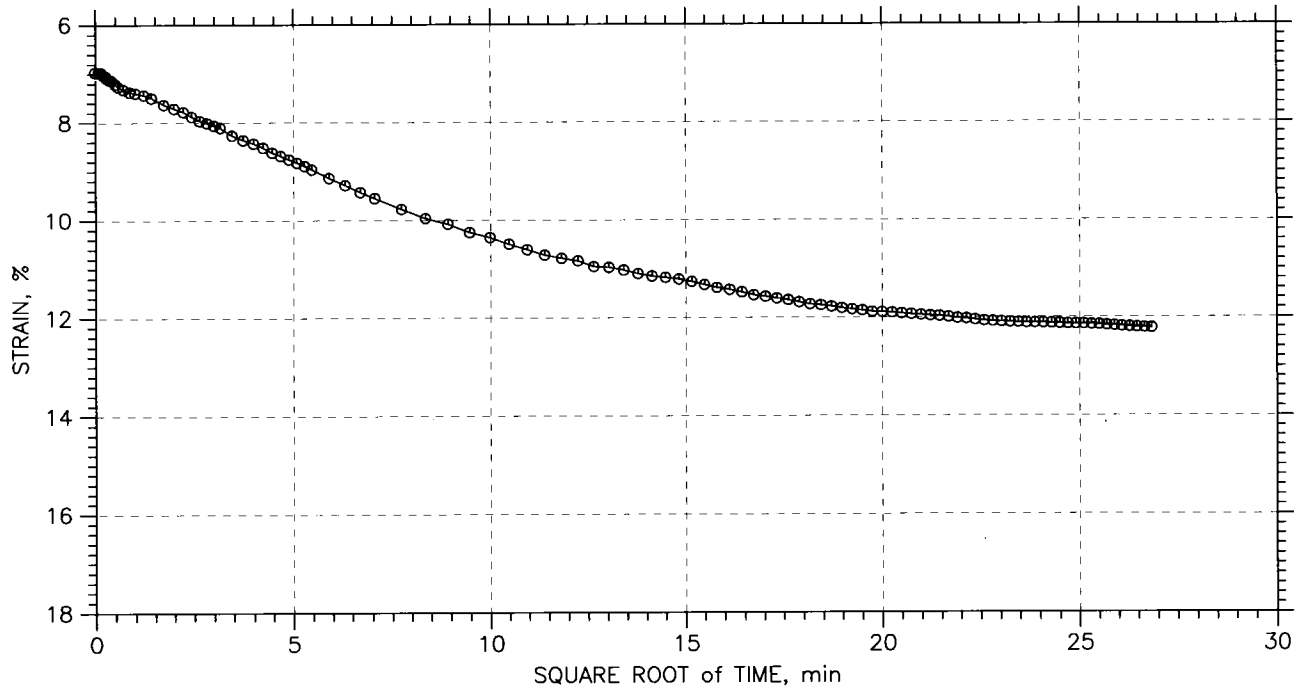
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 160. psf





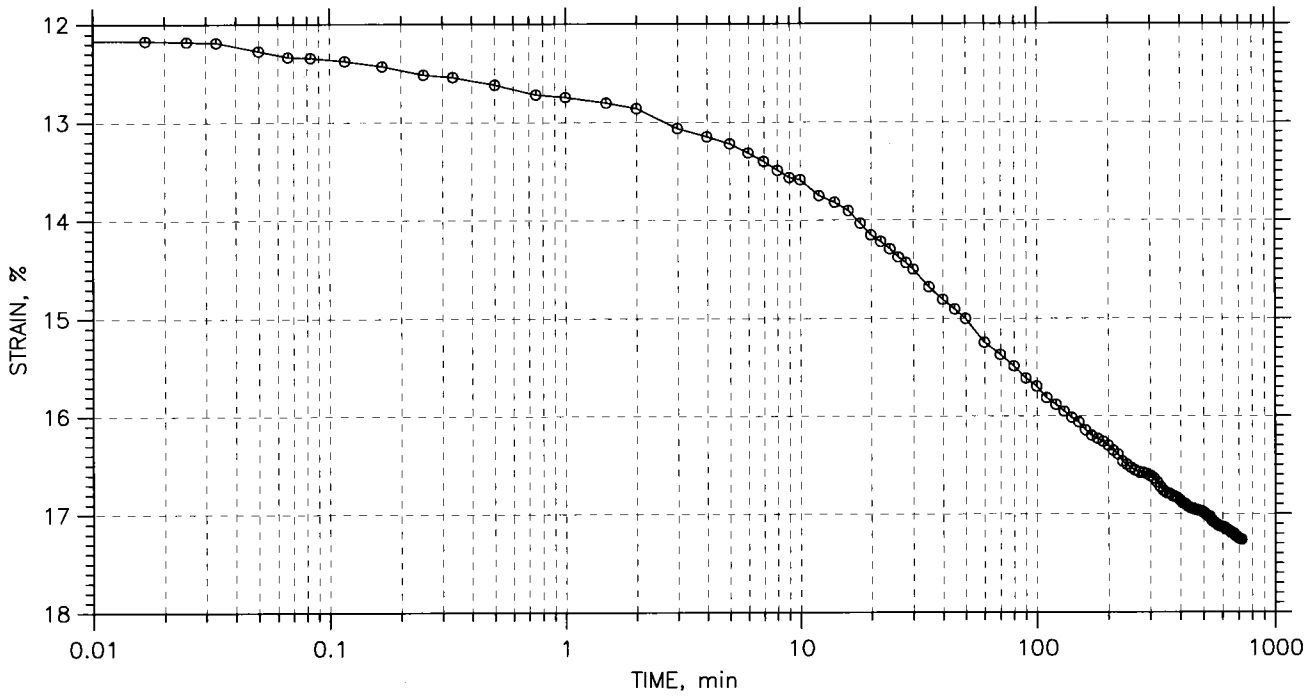
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

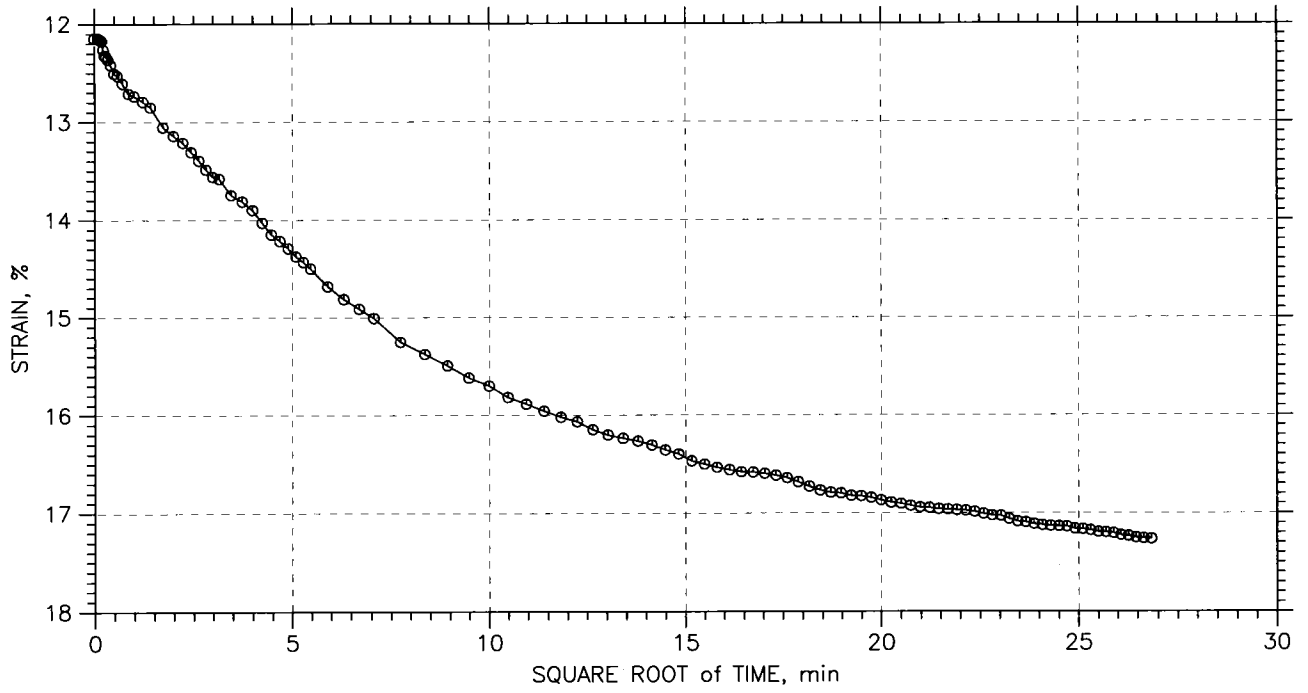
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 320. psf





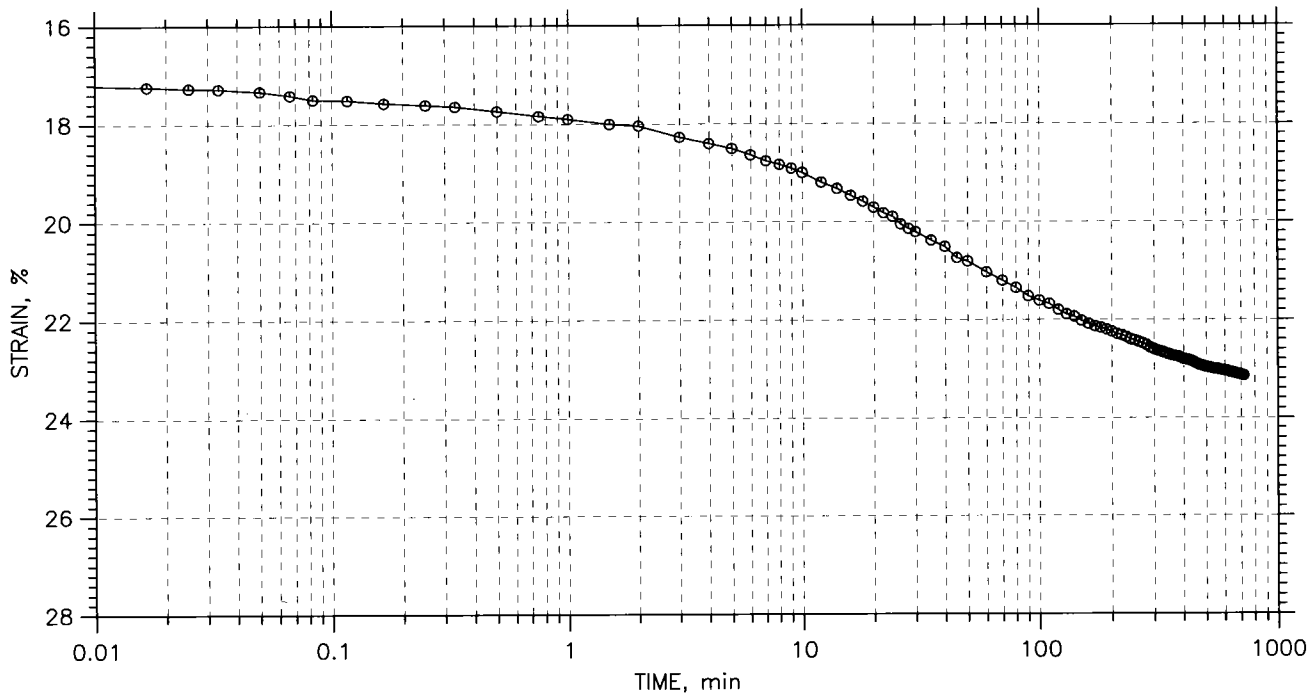
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

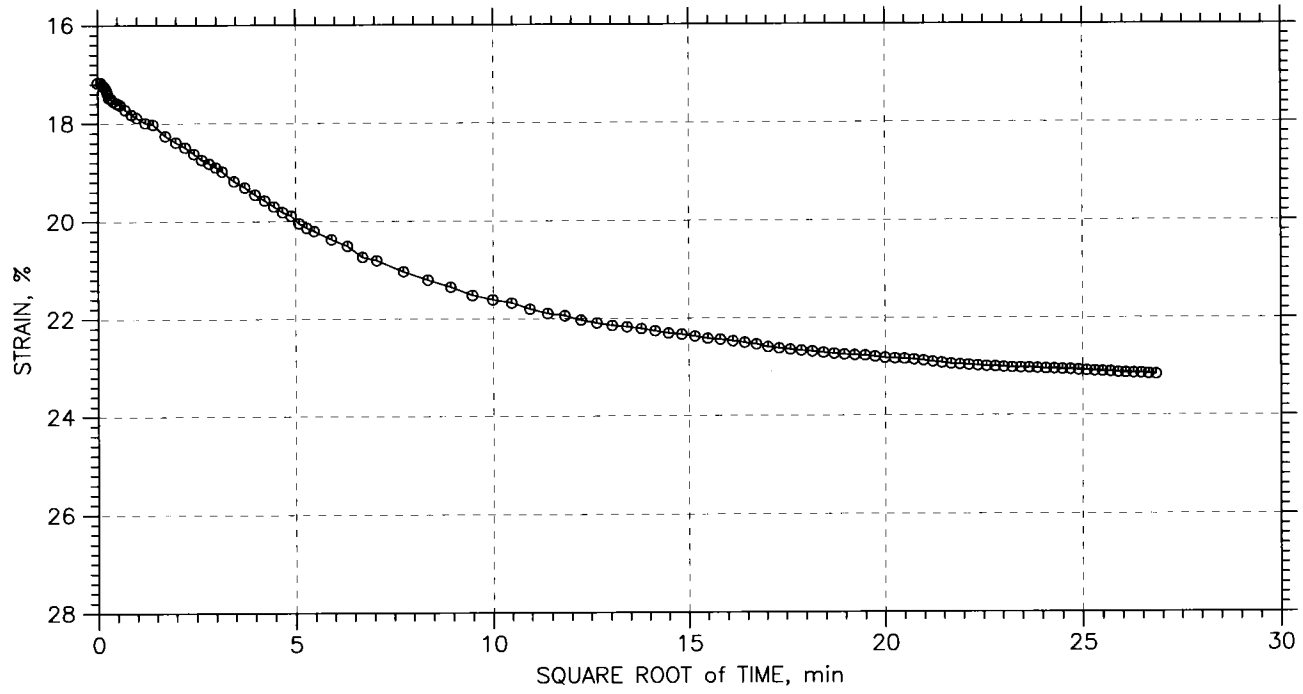
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 640. psf





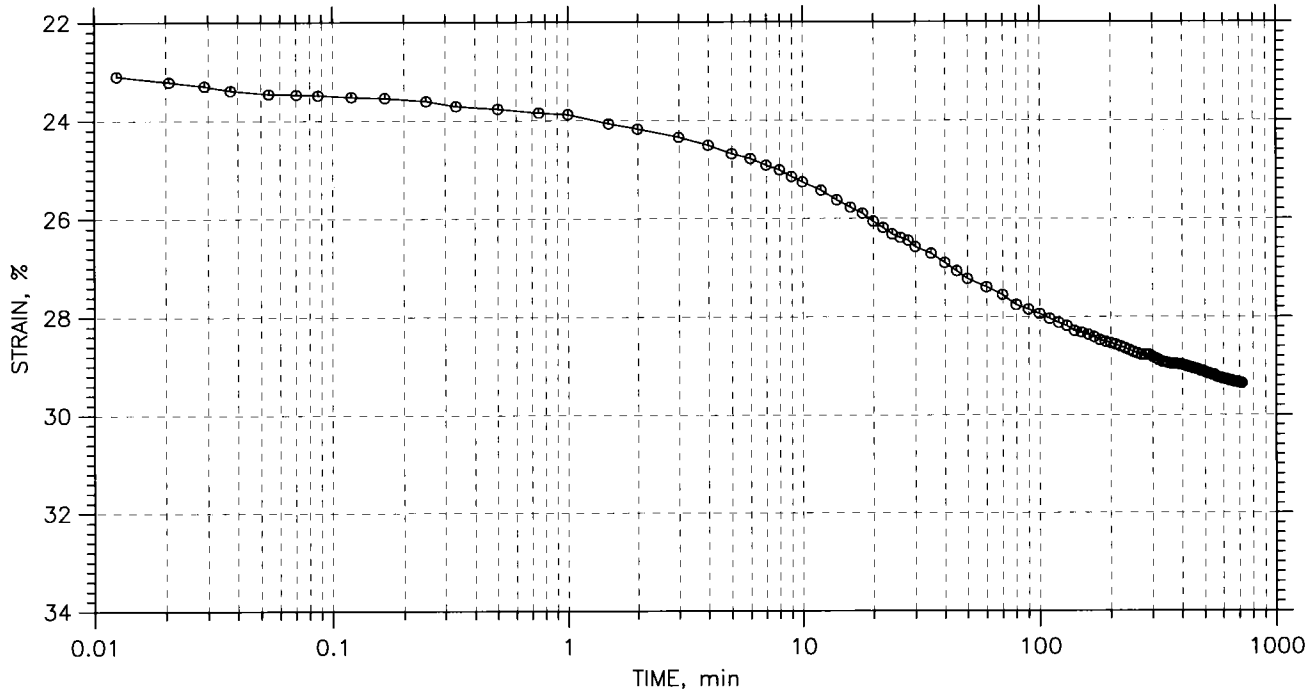
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

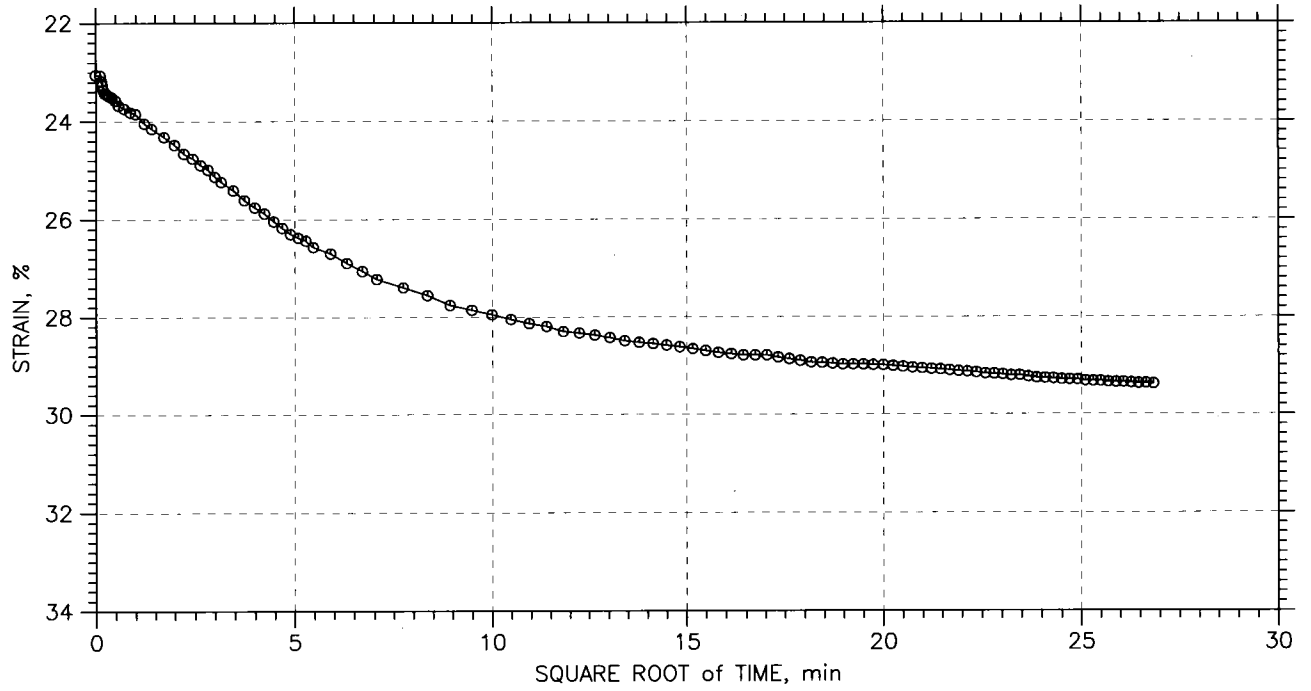
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 1280. psf





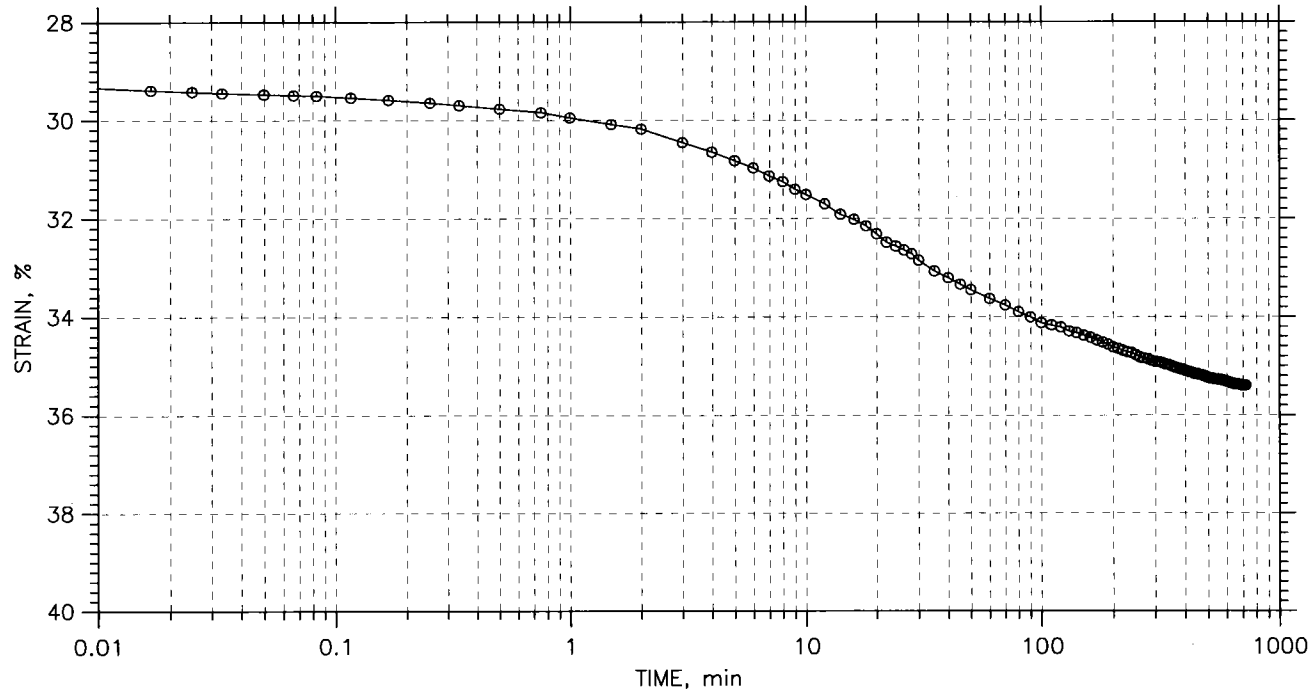
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

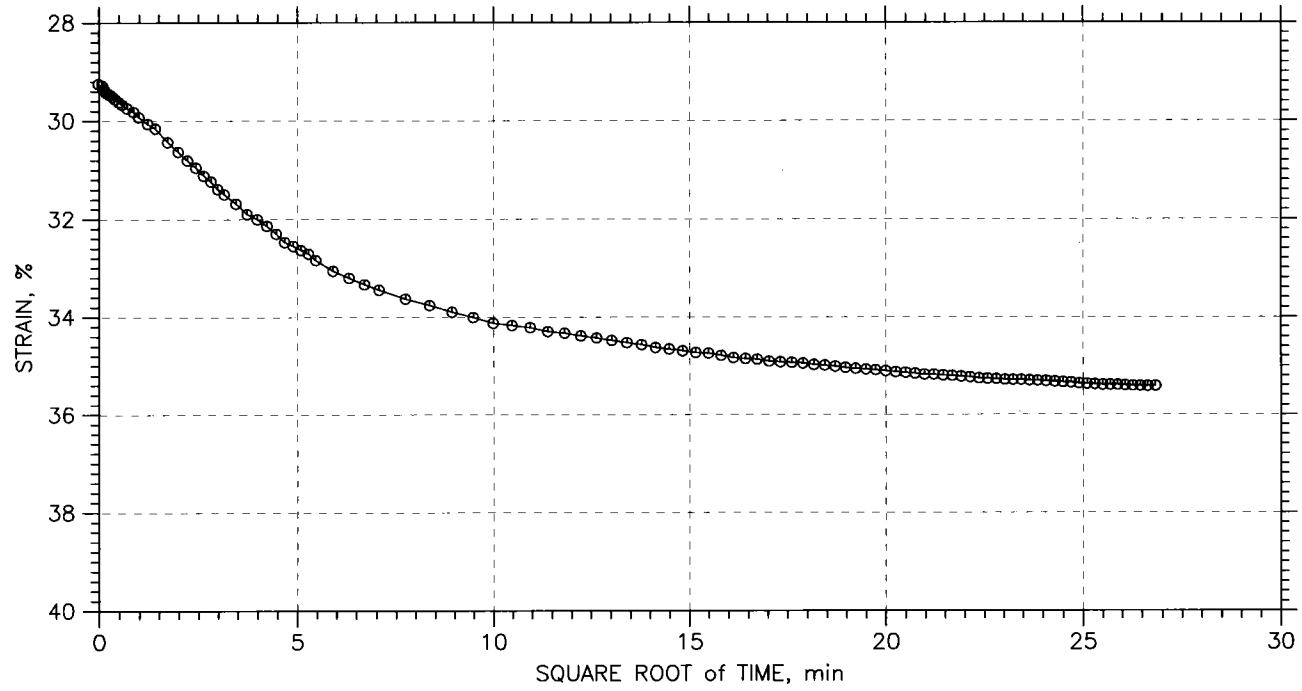
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 2560. psf





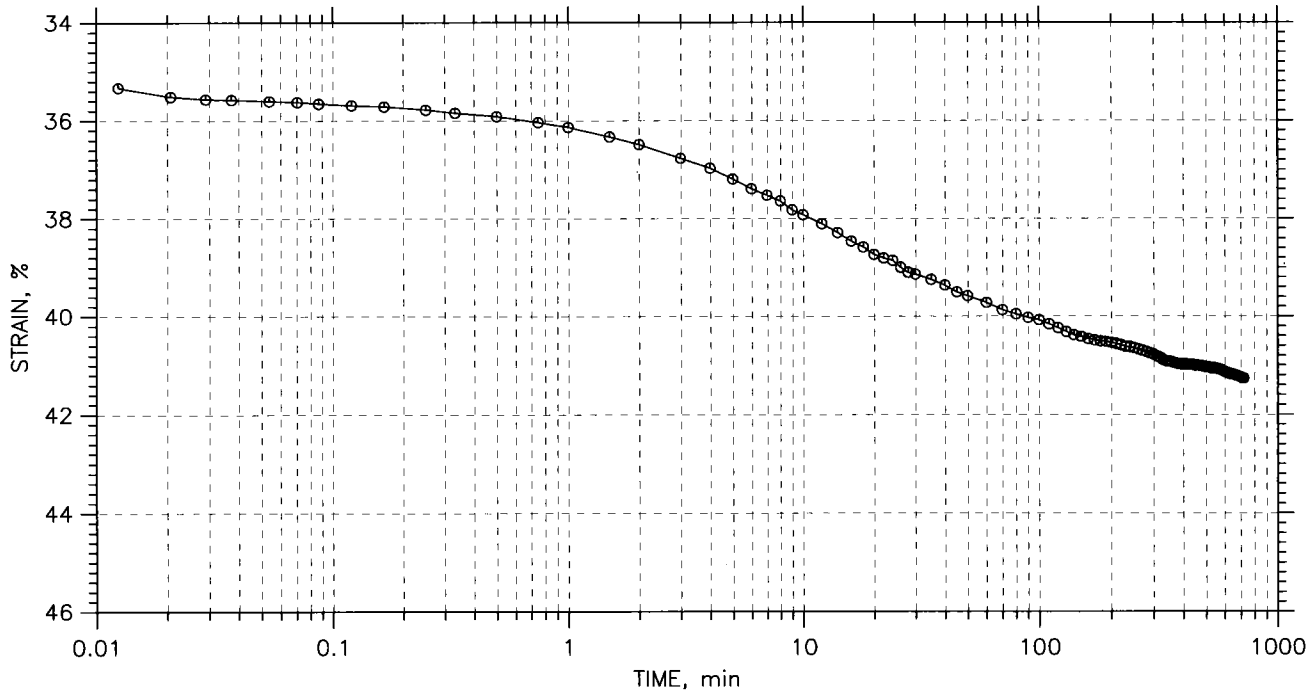
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

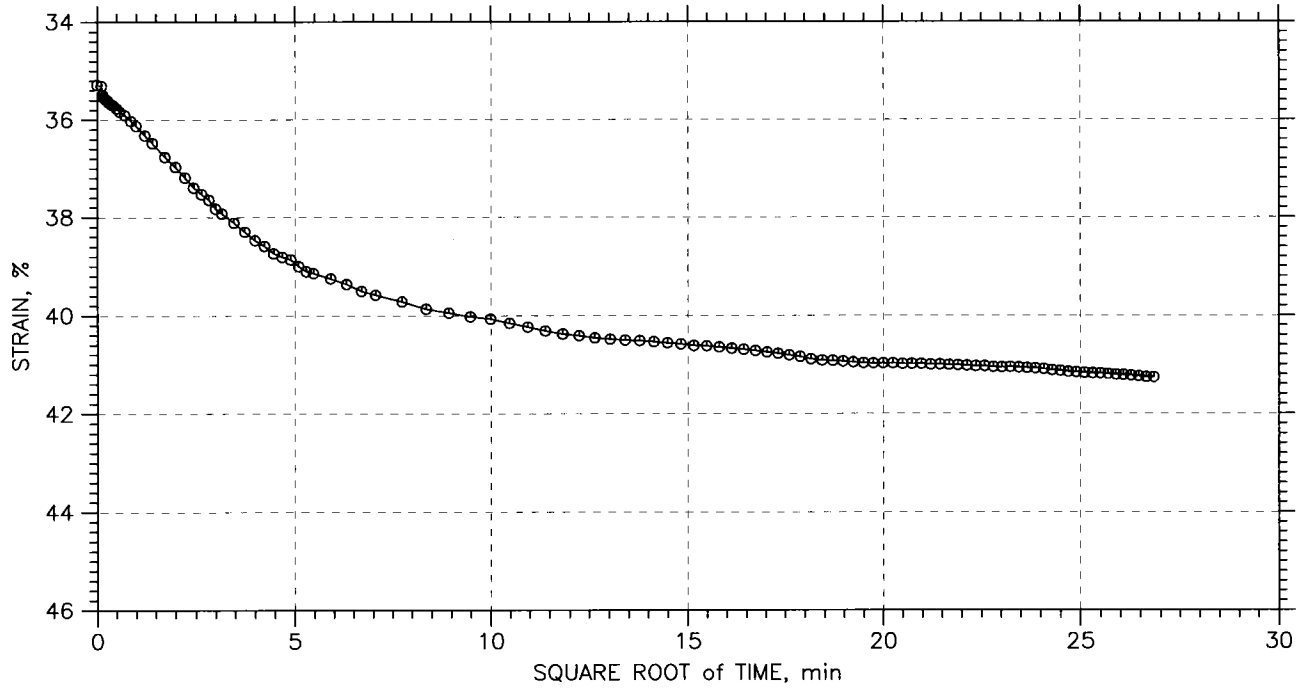
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 5120. psf





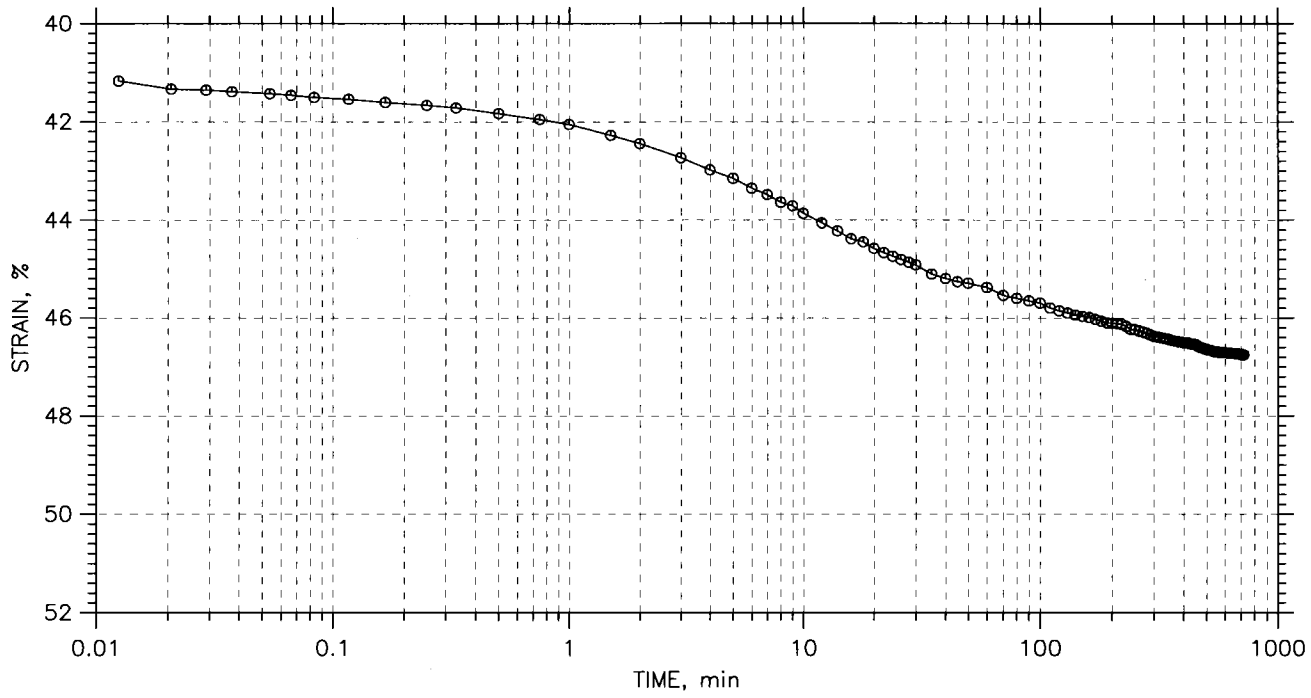
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

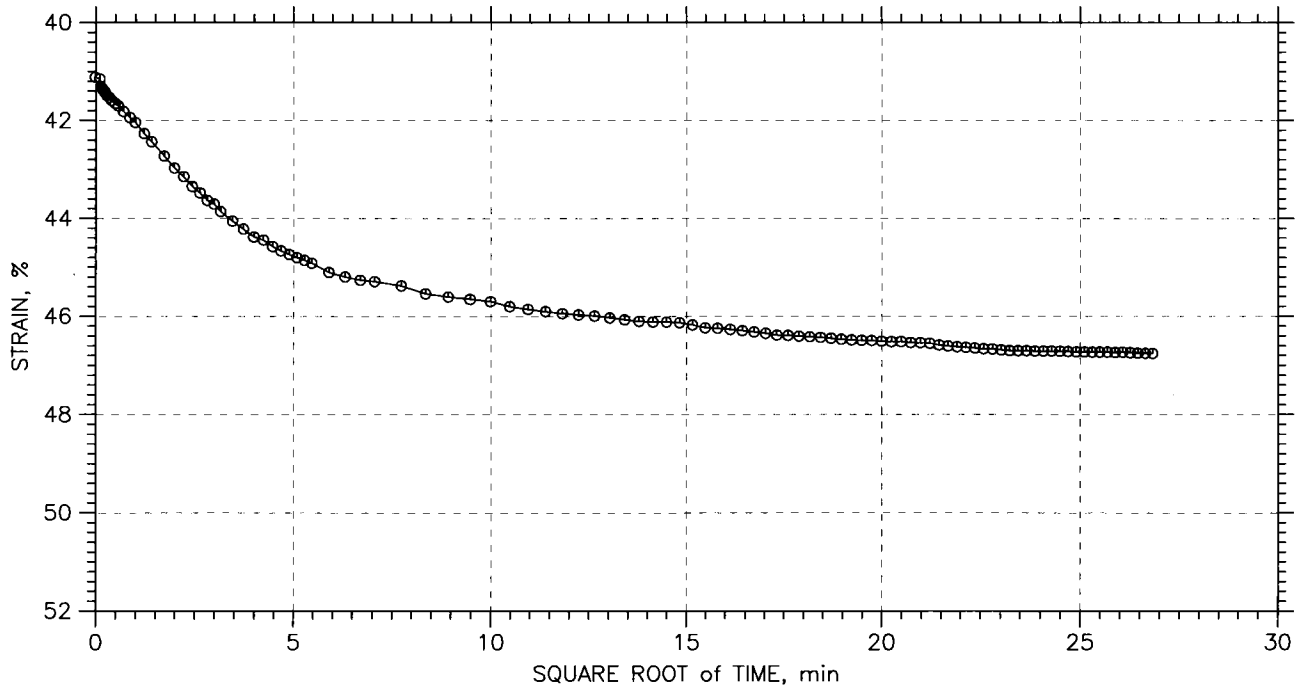
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 10240 psf





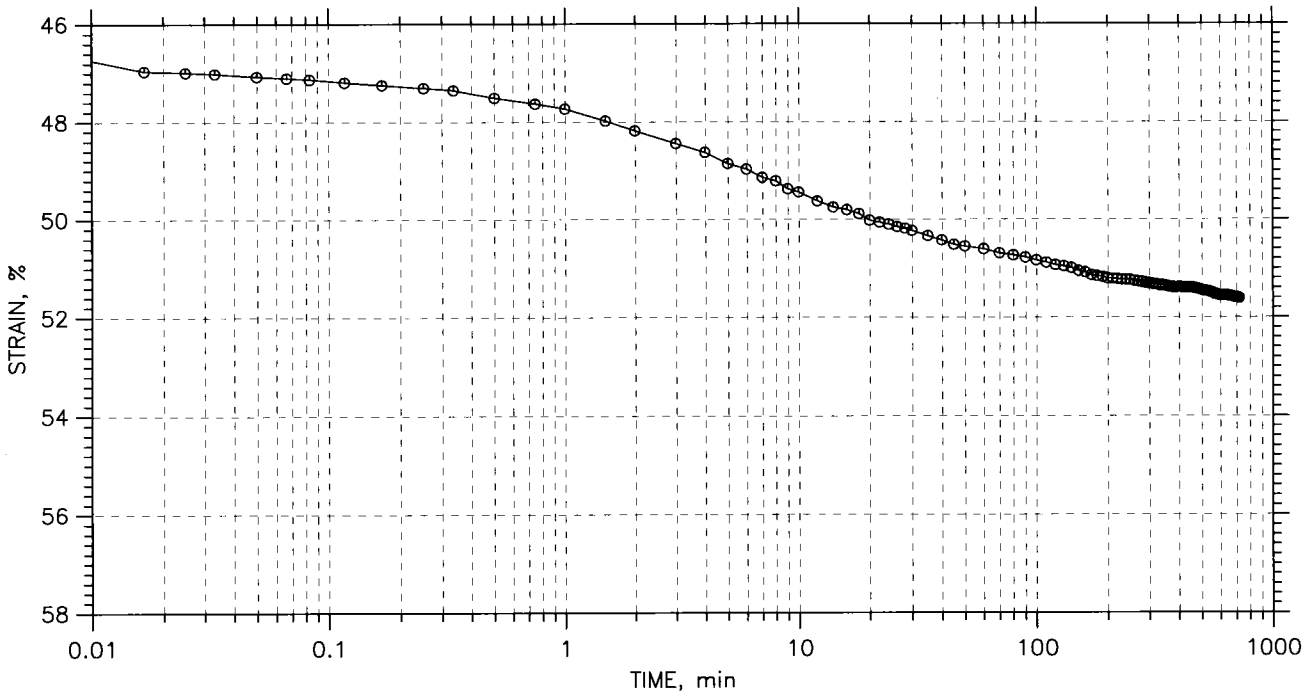
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

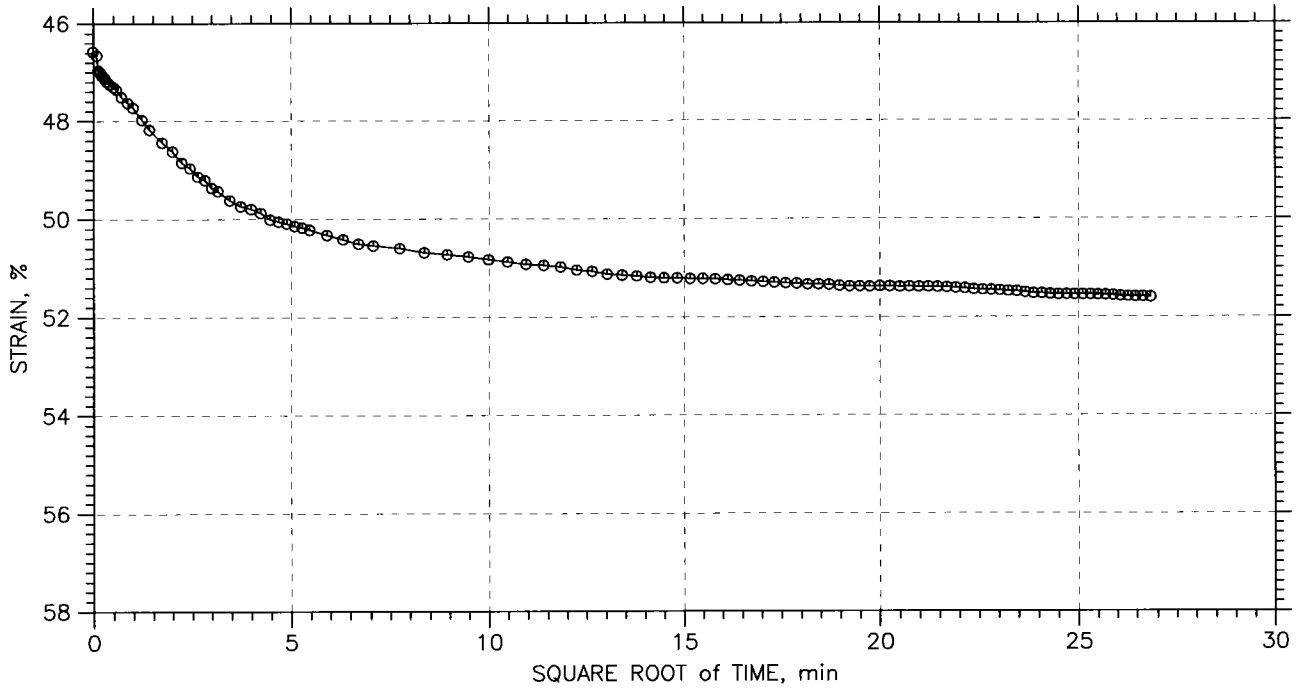
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 20480 psf

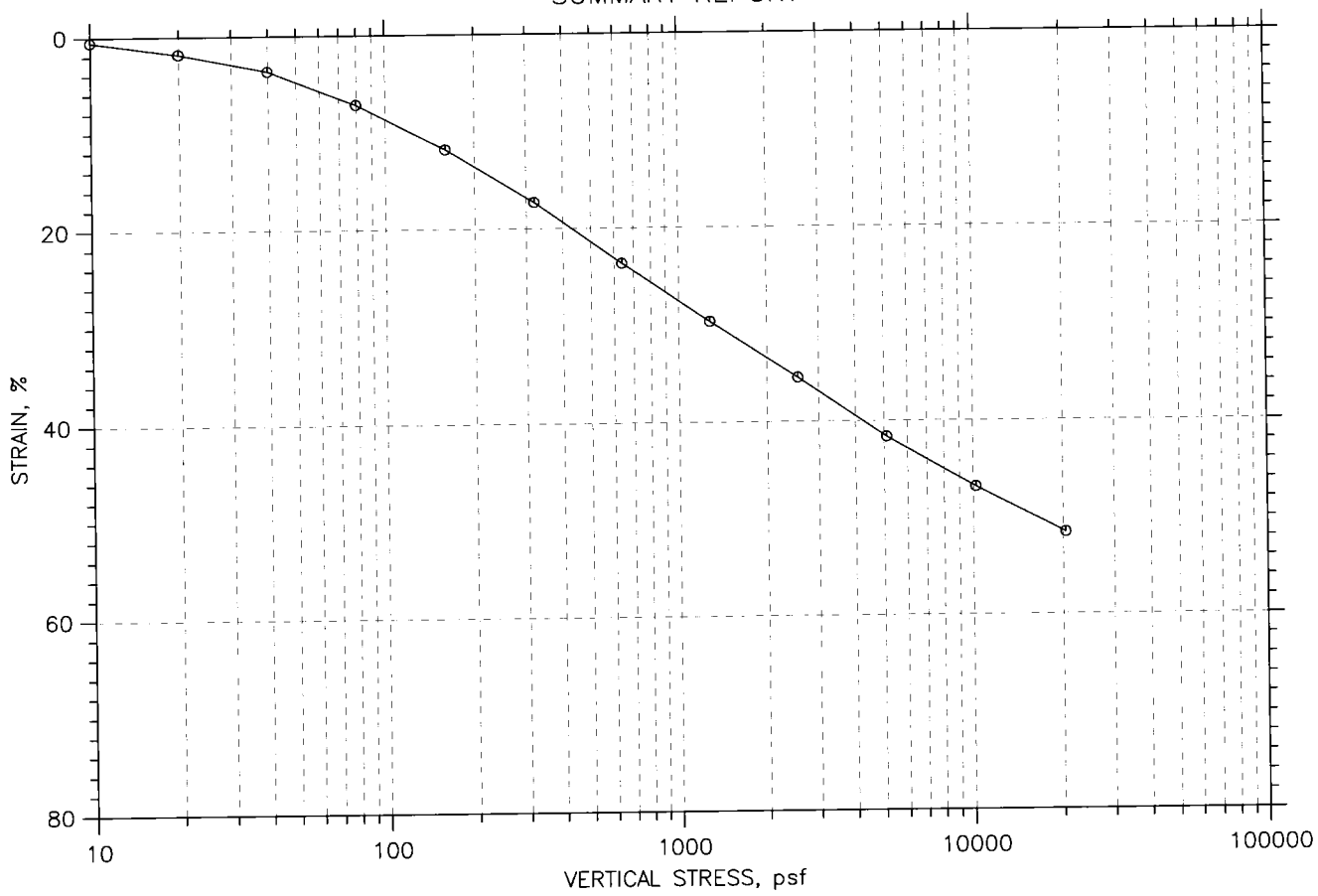


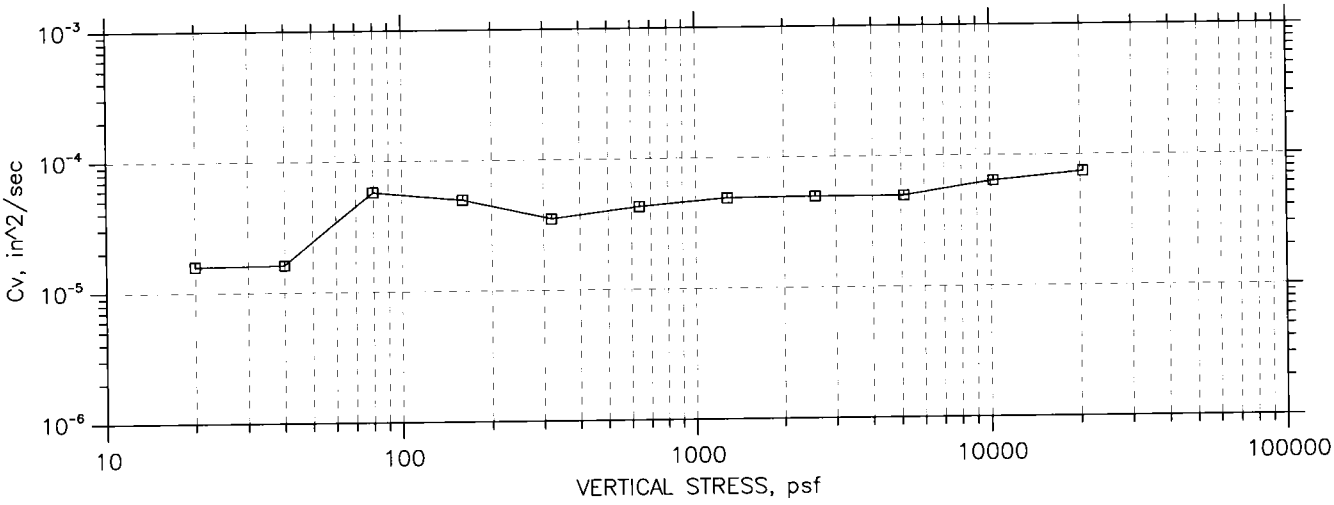


GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 36-1	Test Date: 08/12/09	Depth: ---
	Test No.: C-3	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System E		

CONSOLIDATION TEST DATA

SUMMARY REPORT

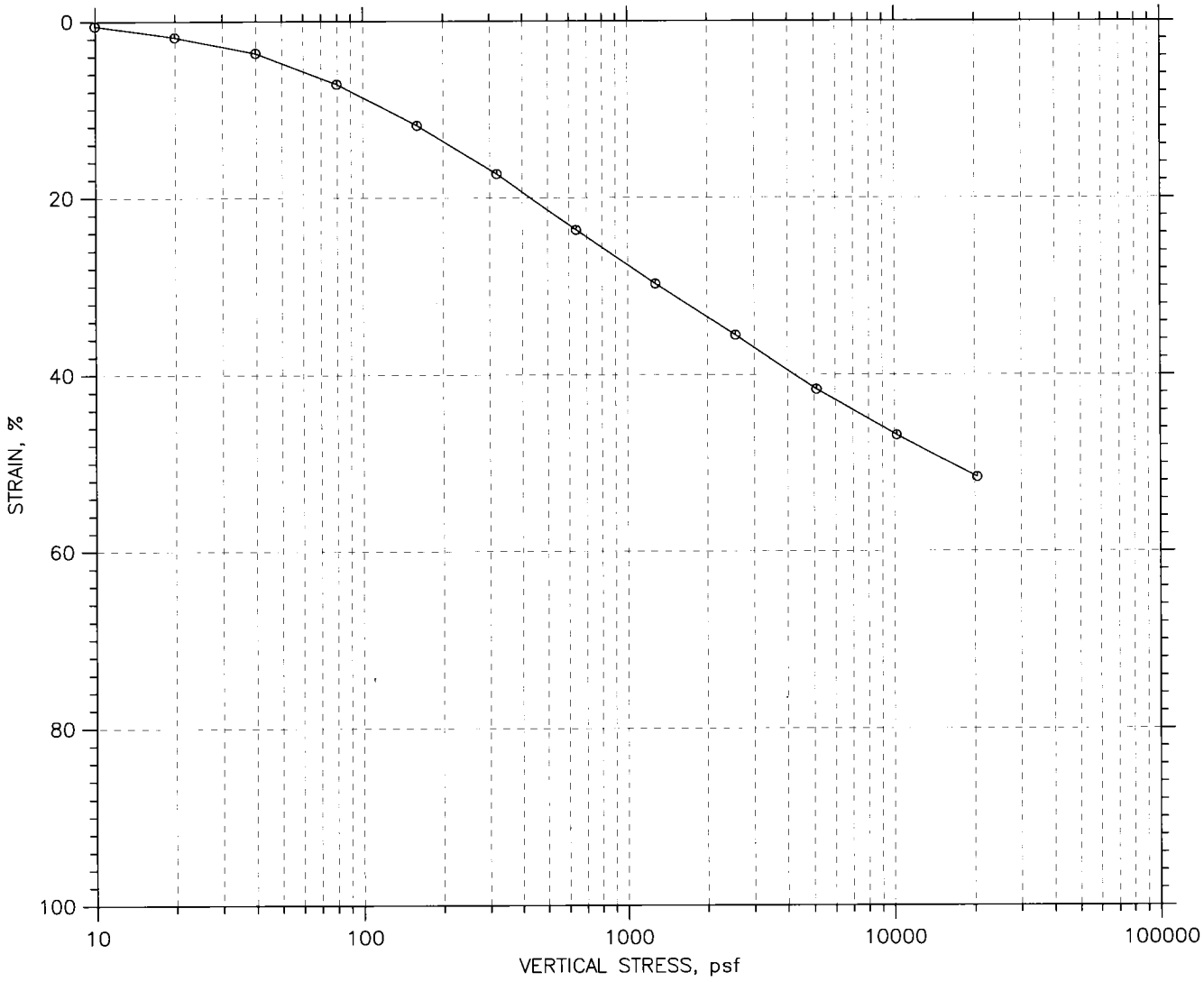




GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

SUMMARY REPORT



				Before Test	After Test
Overburden Pressure: ---			Water Content, %	124.88	42.43
Preconsolidation Pressure: ---			Dry Unit Weight, pcf	38.32	79.3
Compression Index: ---			Saturation, %	98.64	100.00
Diameter: 1.91 in		Height: 1.1 in	Void Ratio	3.49	1.17
LL: ---	PL: ---	PI: --- GS: 2.76			

GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 2-03
Test No.: C-7A

Location: Boston, MA
Tested By: md
Test Date: 08/24/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

Estimated Specific Gravity: 2.76
Initial Void Ratio: 3.49
Final Void Ratio: 1.17

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.10 in
Specimen Diameter: 1.91 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	4524	RING		4778
Wt. Container + Wet Soil, gm	212.3	386.11	359.97	48.77
Wt. Container + Dry Soil, gm	96.26	346.52	346.52	36.71
Wt. Container, gm	8.19	314.81	314.81	8.29
Wt. Dry Soil, gm	88.07	31.706	31.706	28.42
Water Content, %	131.76	124.88	42.43	42.43
Void Ratio	---	3.49	1.17	---
Degree of Saturation, %	---	98.64	100.00	---
Dry Unit Weight, pcf	---	38.324	79.3	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

CONSOLIDATION TEST DATA

Project: MBDS
Boring No.: ---
Sample No.: 2-03
Test No.: C-7A

Location: Boston, MA
Tested By: md
Test Date: 08/24/09
Sample Type: tube

Project No.: GTX-9197
Checked By: jdt
Depth: ---
Elevation: ---

Soil Description: Wet, dark gray silt
Remarks: System C

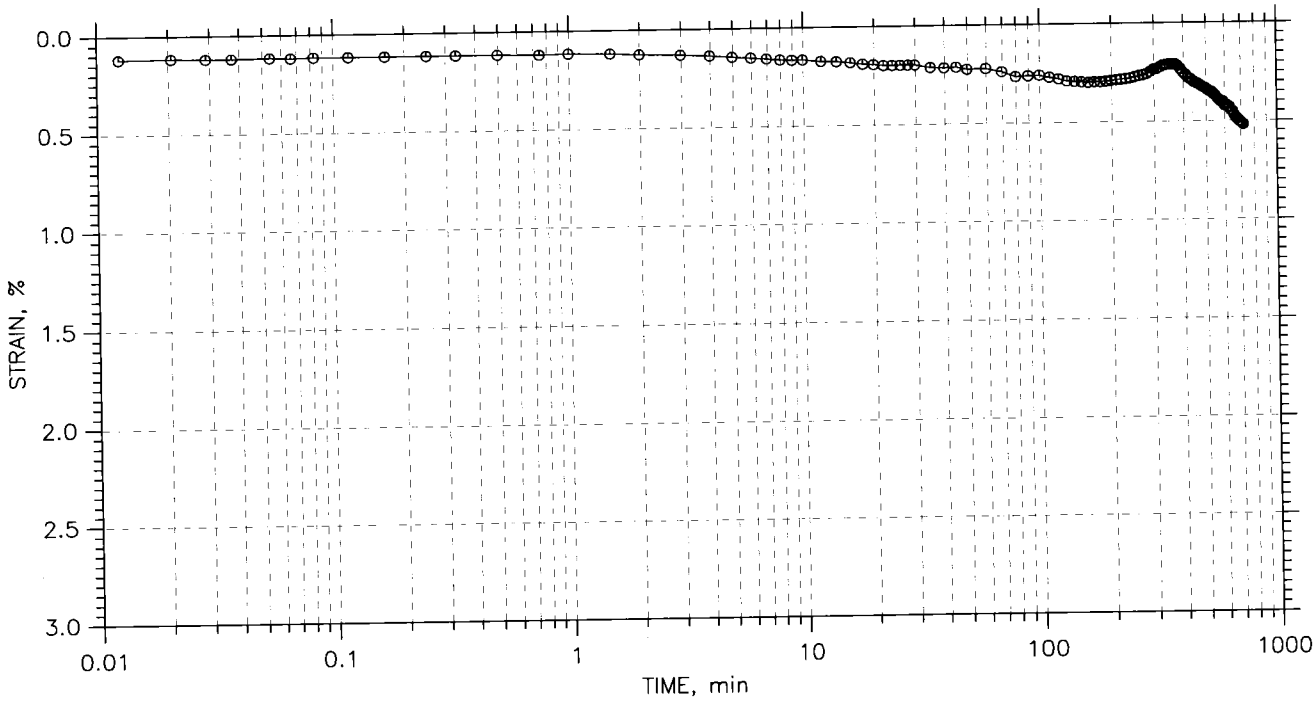
	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	10	0.005717	3.466	0.52	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
2	20	0.01949	3.409	1.77	61.5	0.0	1.58e-005	0.00e+000	1.58e-005
3	40	0.03947	3.328	3.59	58.4	0.0	1.61e-005	0.00e+000	1.61e-005
4	80	0.07803	3.170	7.09	15.5	0.0	5.74e-005	0.00e+000	5.74e-005
5	160	0.1296	2.960	11.78	19.3	13.5	4.22e-005	6.02e-005	4.97e-005
6	320	0.1904	2.712	17.31	23.8	17.6	3.05e-005	4.12e-005	3.51e-005
7	640	0.2607	2.425	23.70	17.3	12.2	3.64e-005	5.17e-005	4.27e-005
8	1.28e+003	0.3277	2.152	29.79	12.4	9.4	4.29e-005	5.67e-005	4.89e-005
9	2.56e+003	0.392	1.889	35.63	10.8	7.4	4.17e-005	6.11e-005	4.96e-005
10	5.12e+003	0.4595	1.614	41.77	8.3	6.8	4.49e-005	5.52e-005	4.95e-005
11	1.02e+004	0.5164	1.381	46.95	5.2	4.5	5.96e-005	6.78e-005	6.35e-005
12	2.05e+004	0.5684	1.169	51.67	3.8	3.1	6.68e-005	8.29e-005	7.40e-005

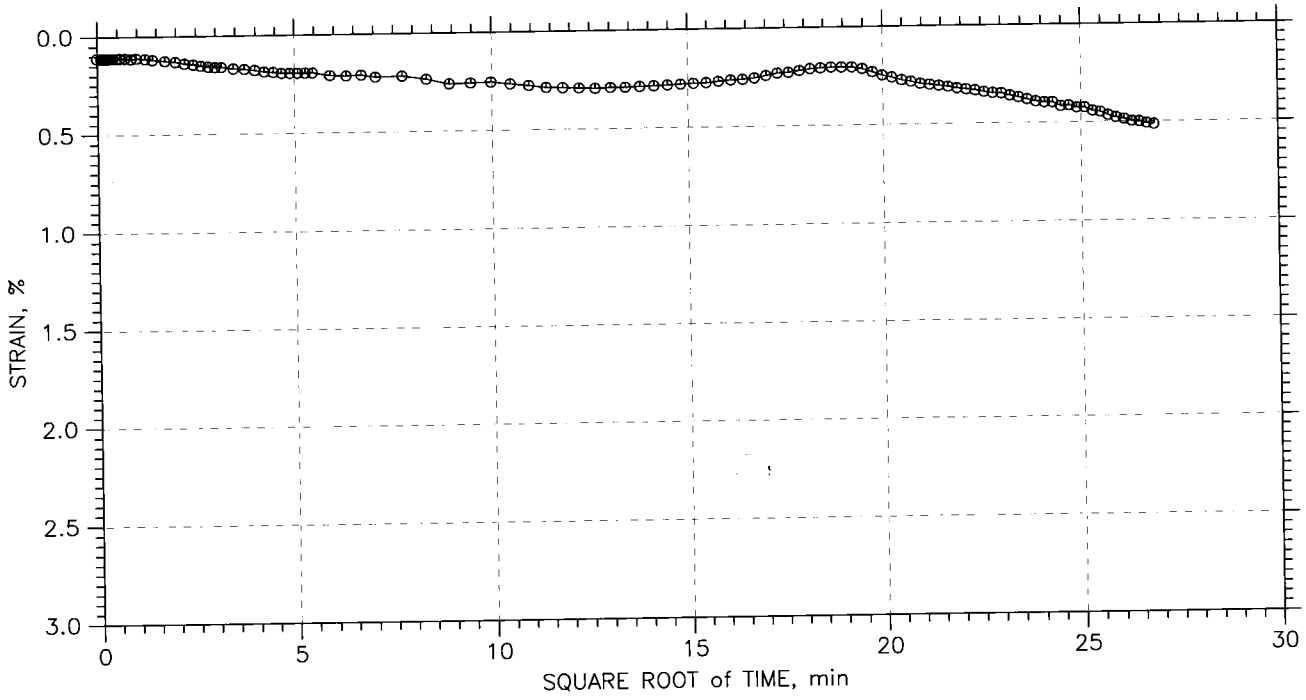
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 10. psf





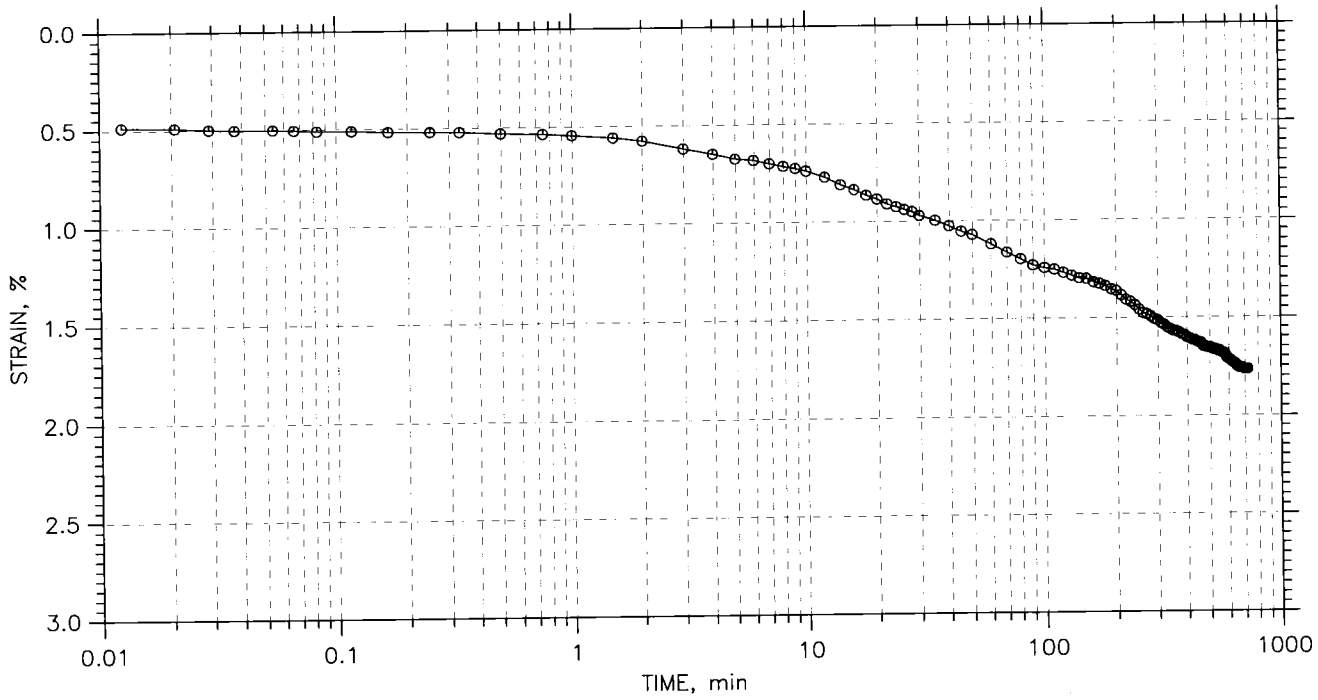
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

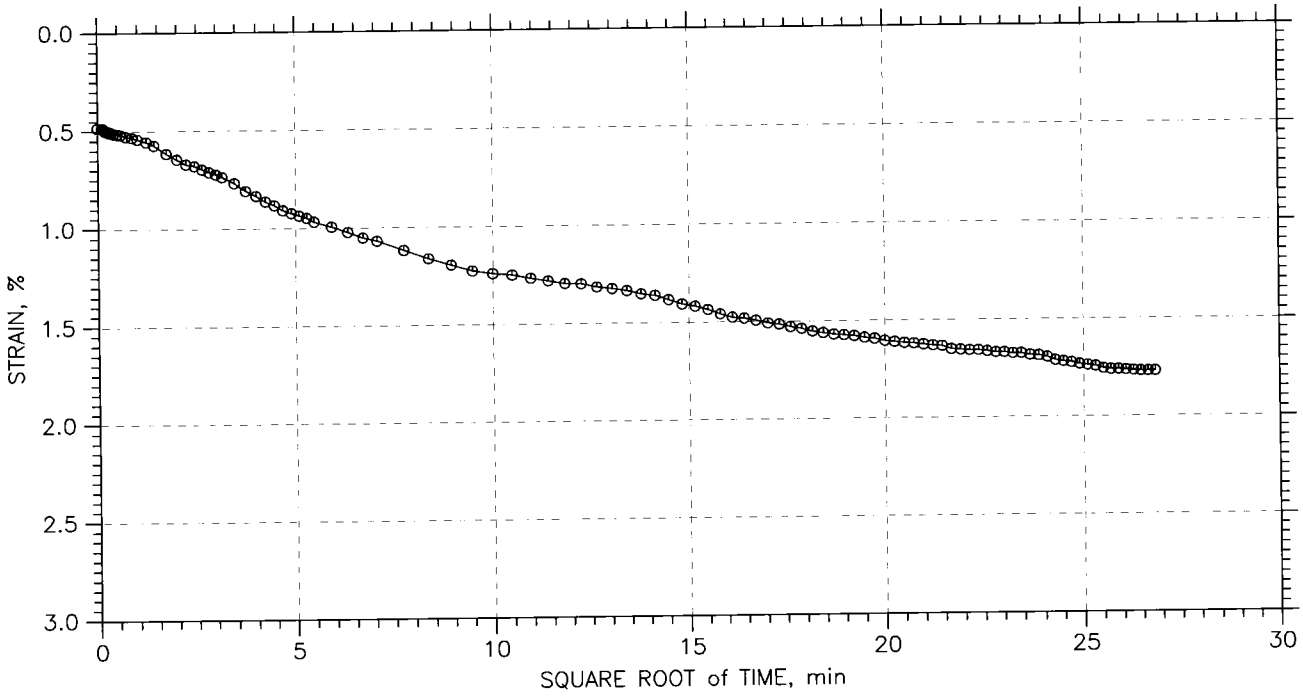
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 20. psf





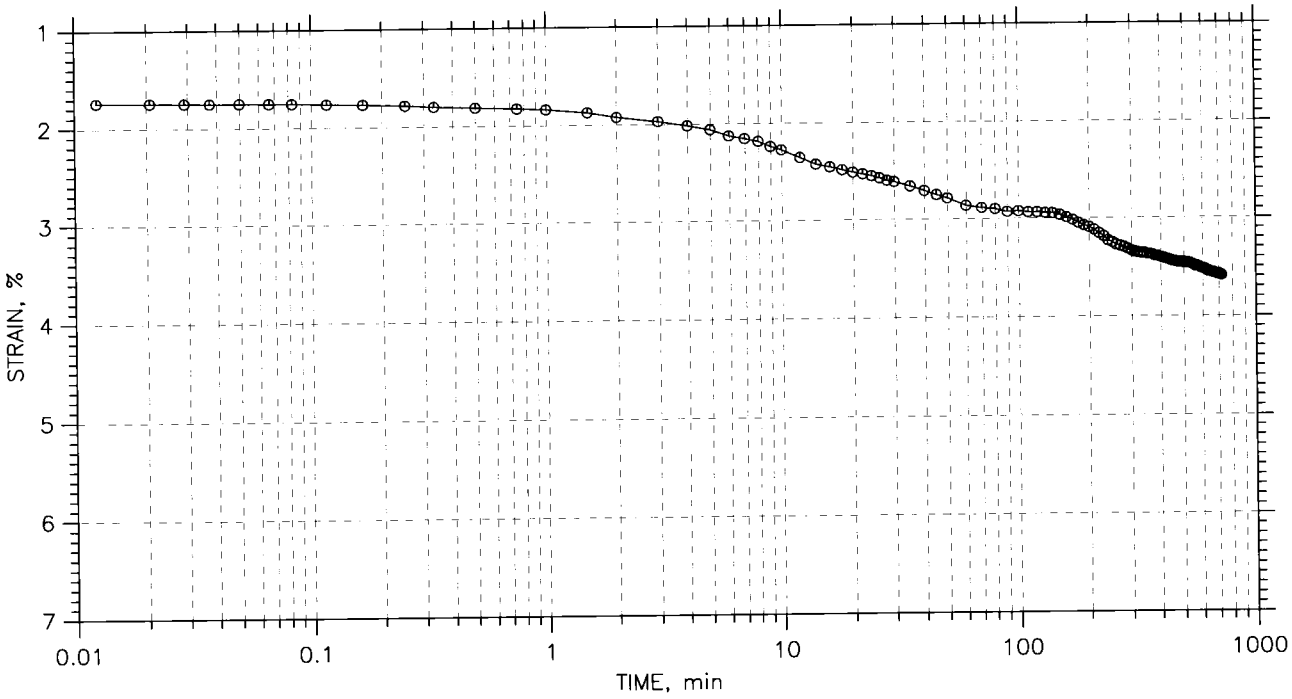
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

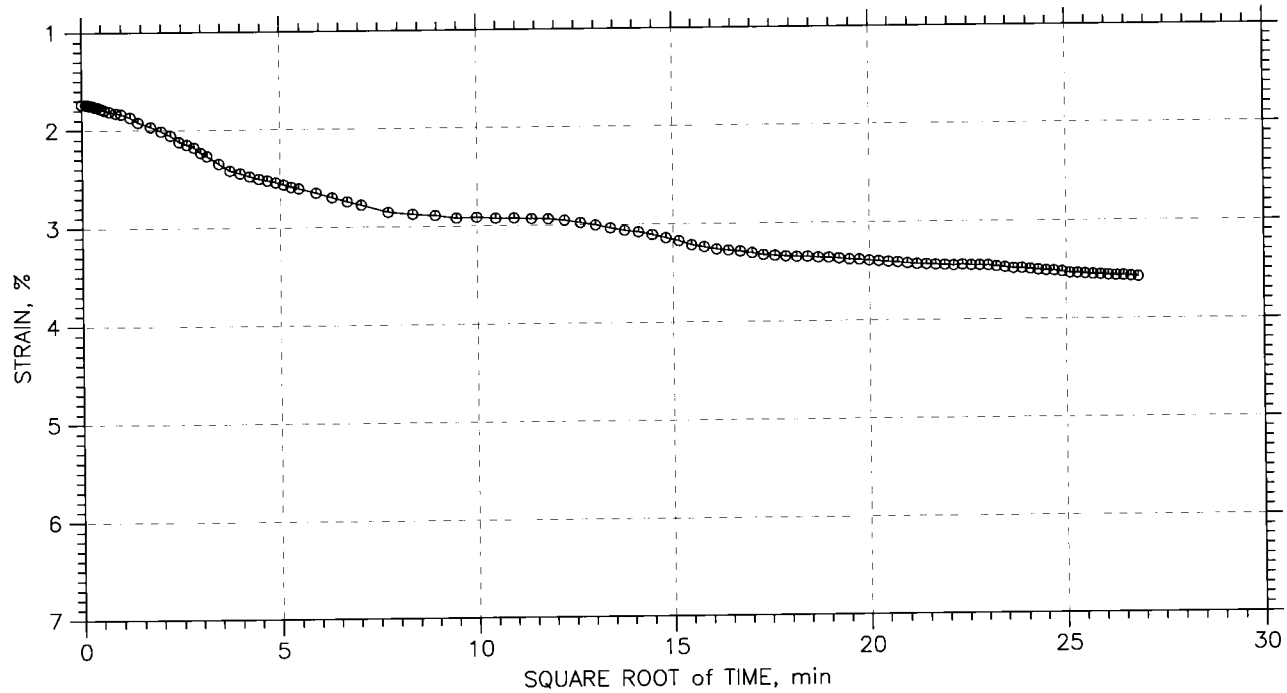
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 40. psf





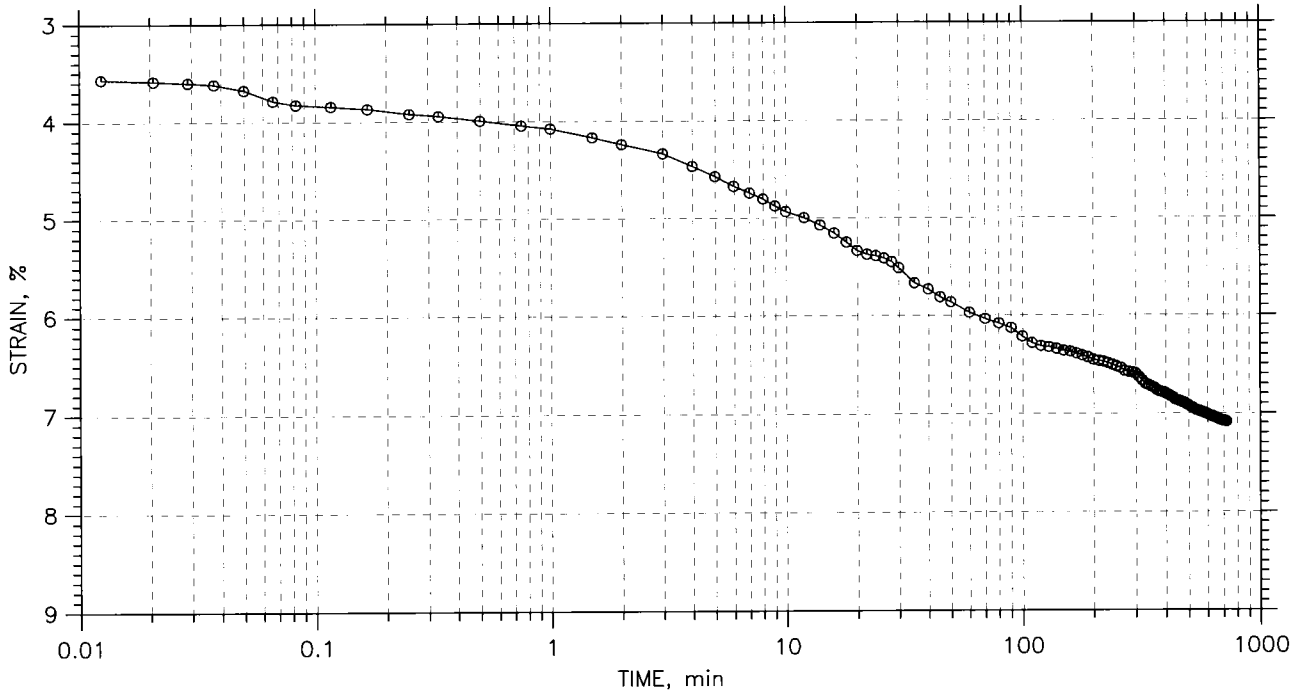
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

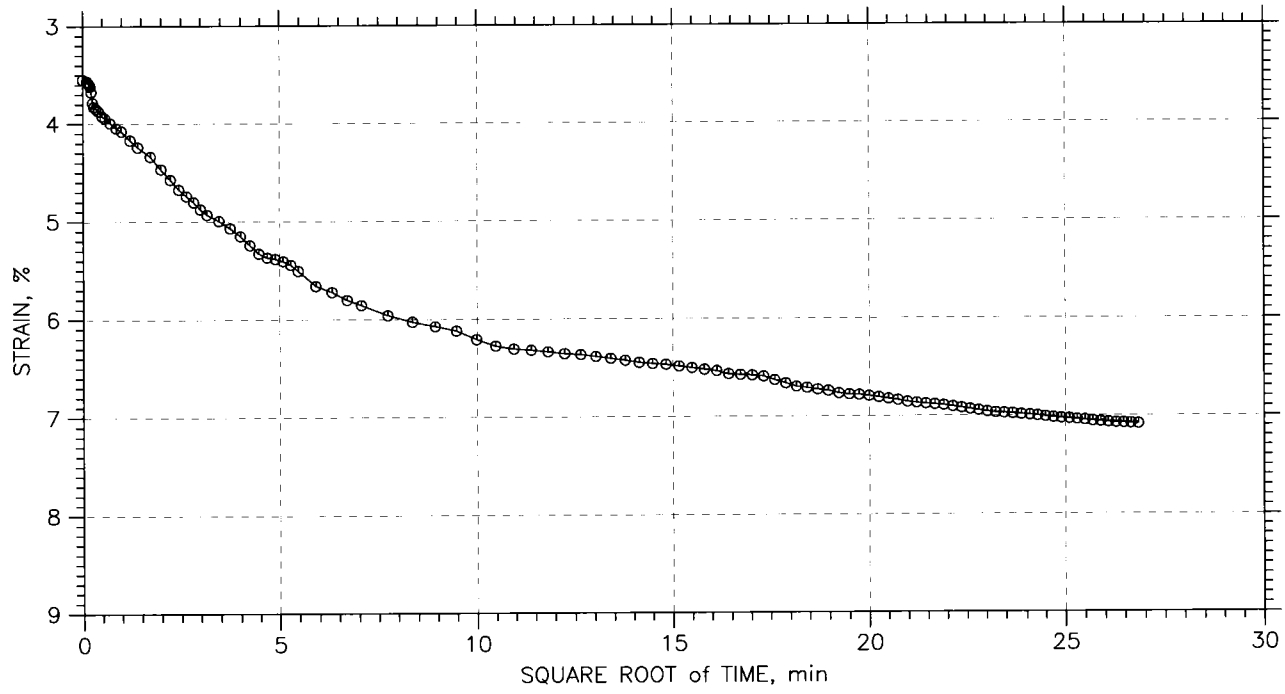
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 80. psf





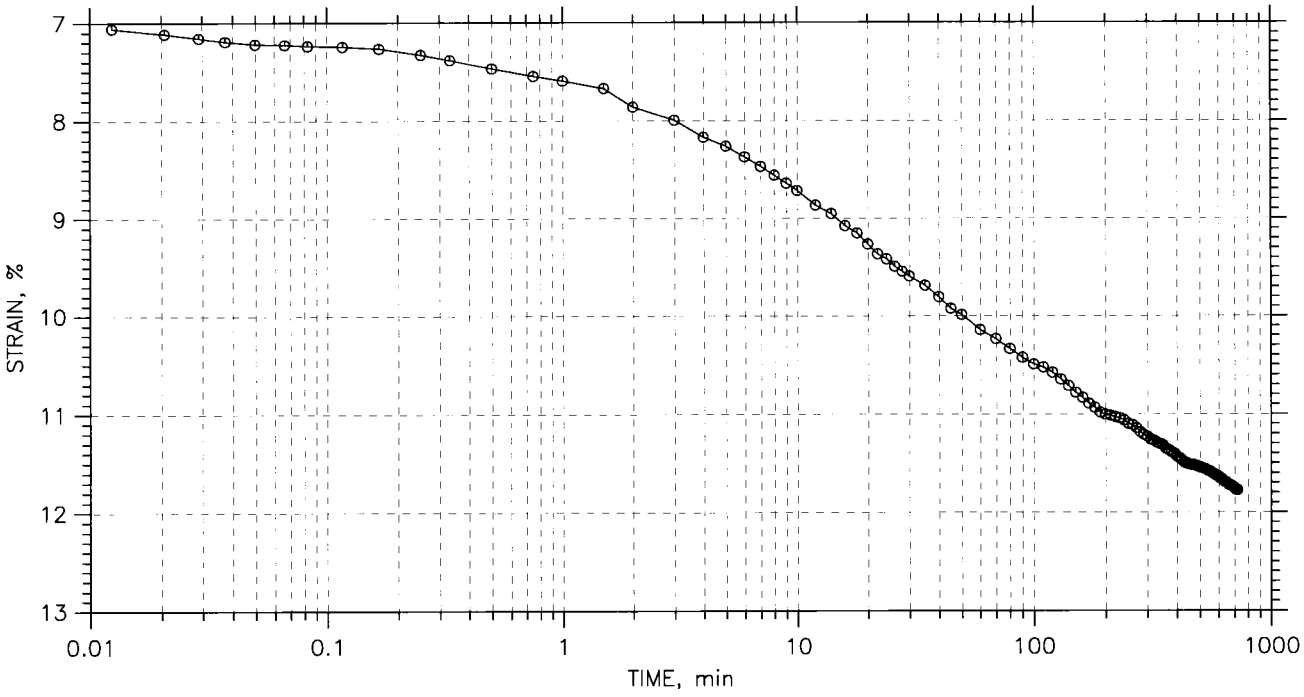
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

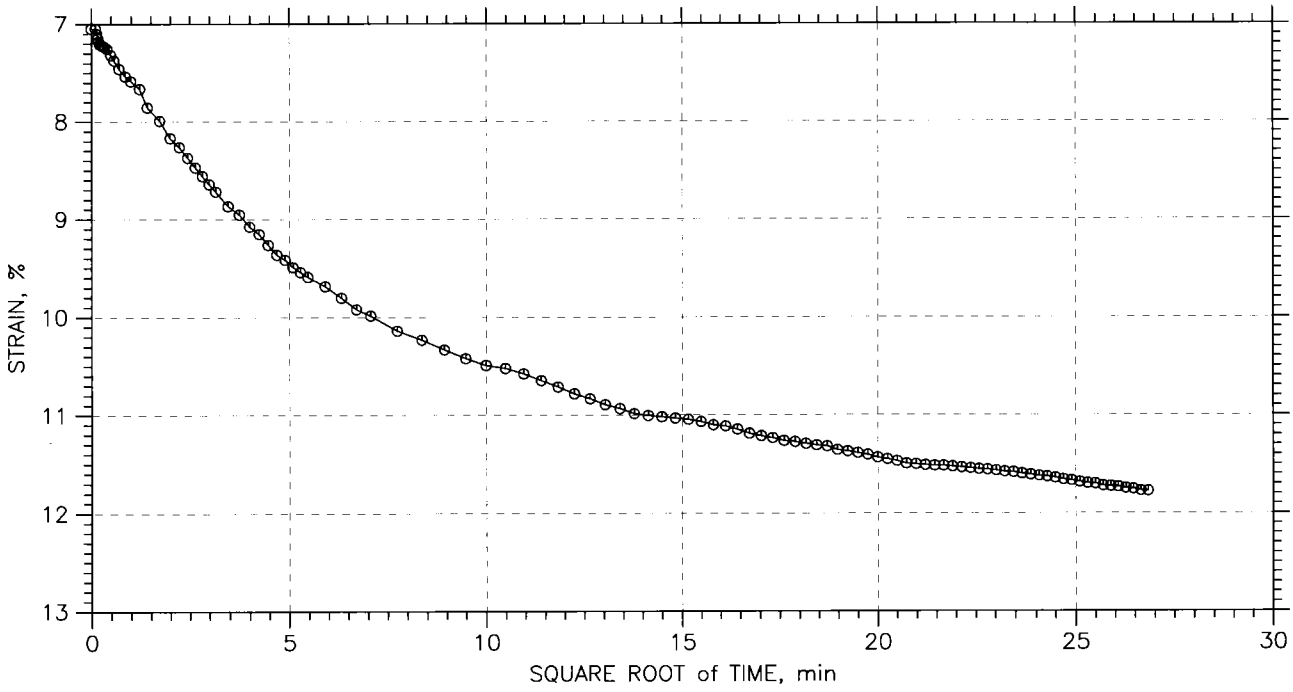
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 160. psf





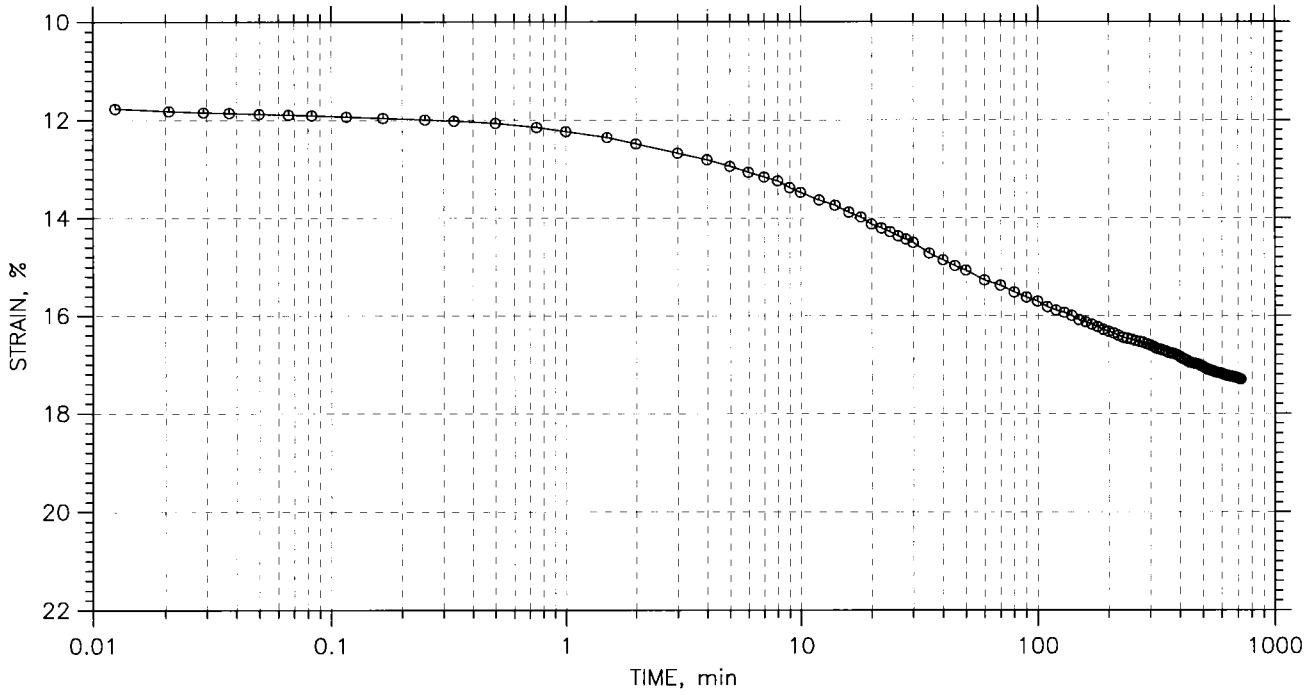
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

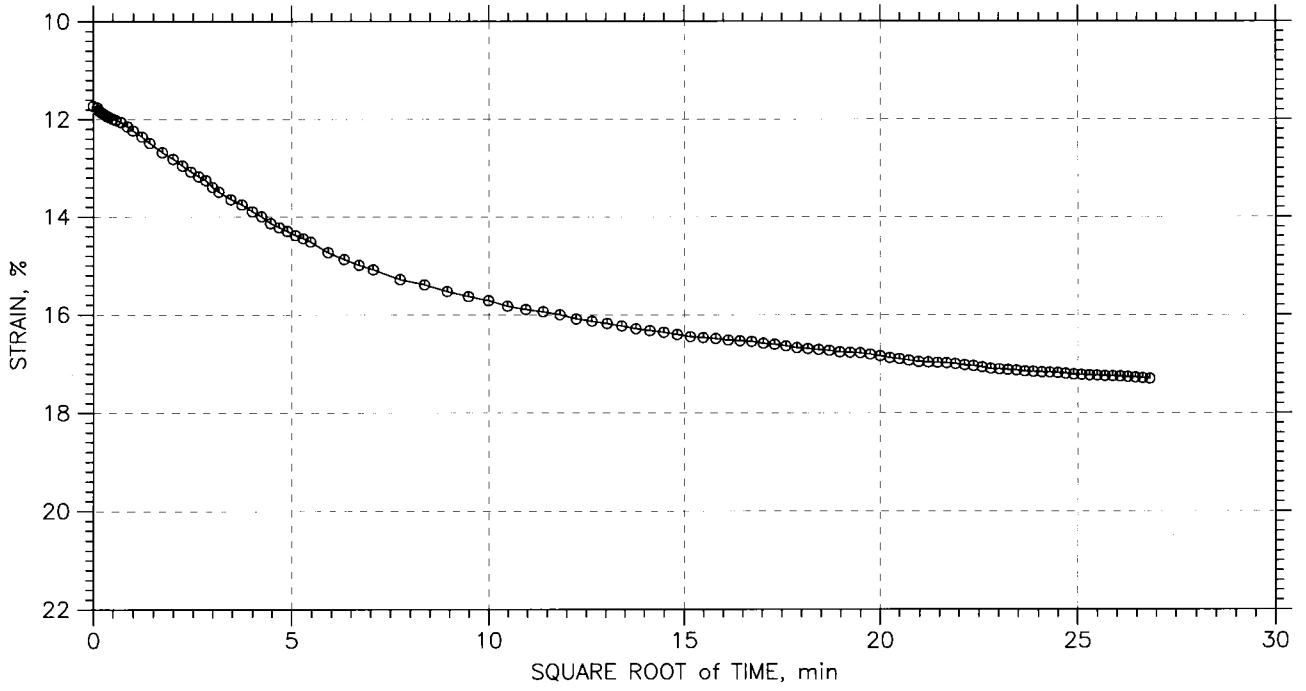
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 320. psf





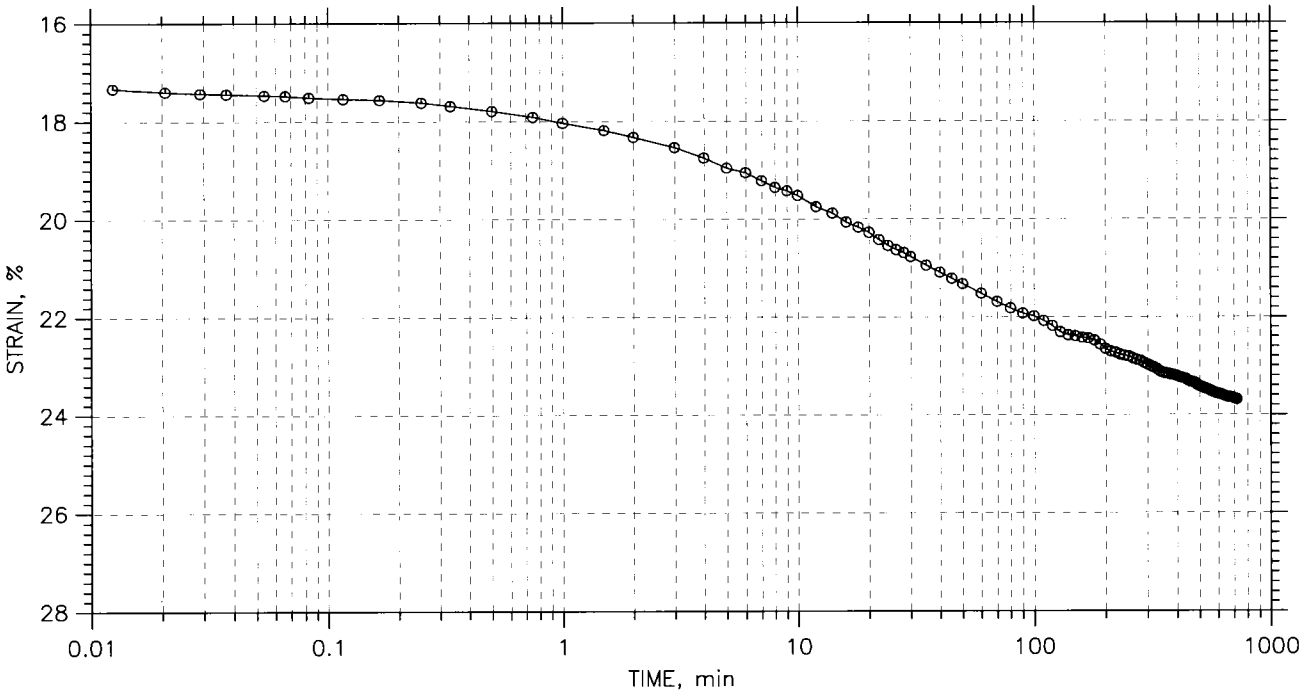
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

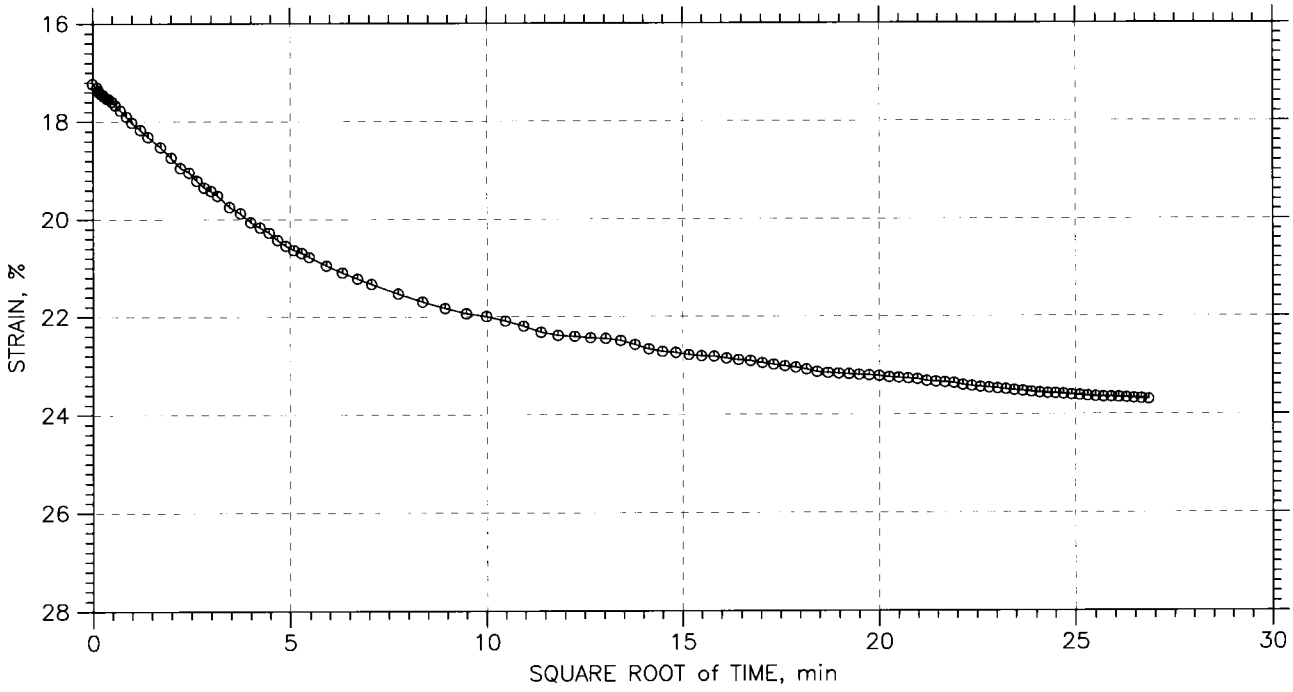
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 640. psf





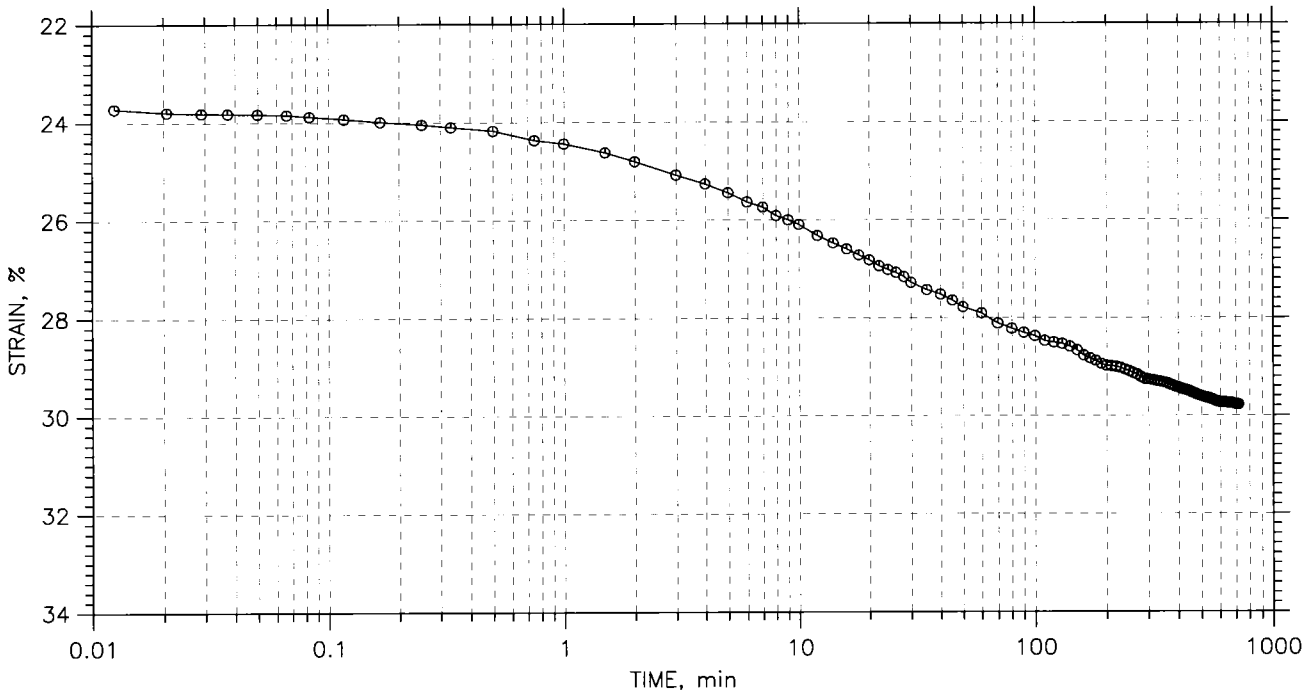
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

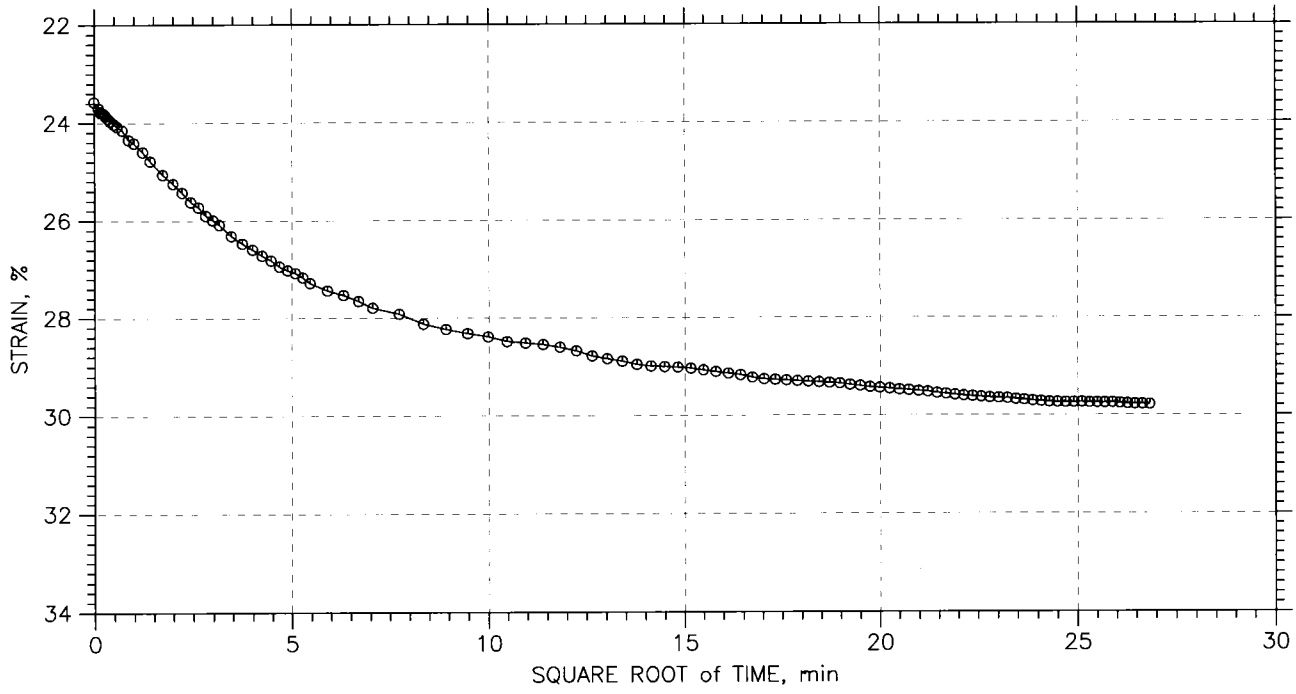
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 1280. psf





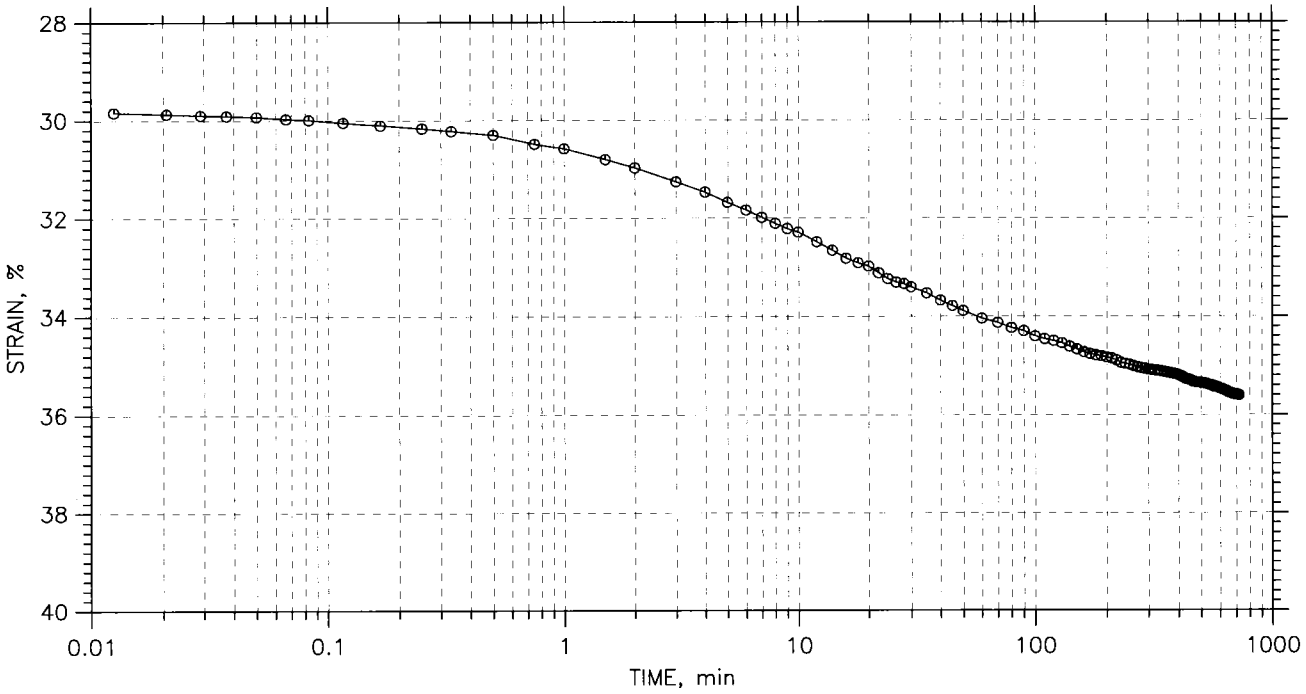
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

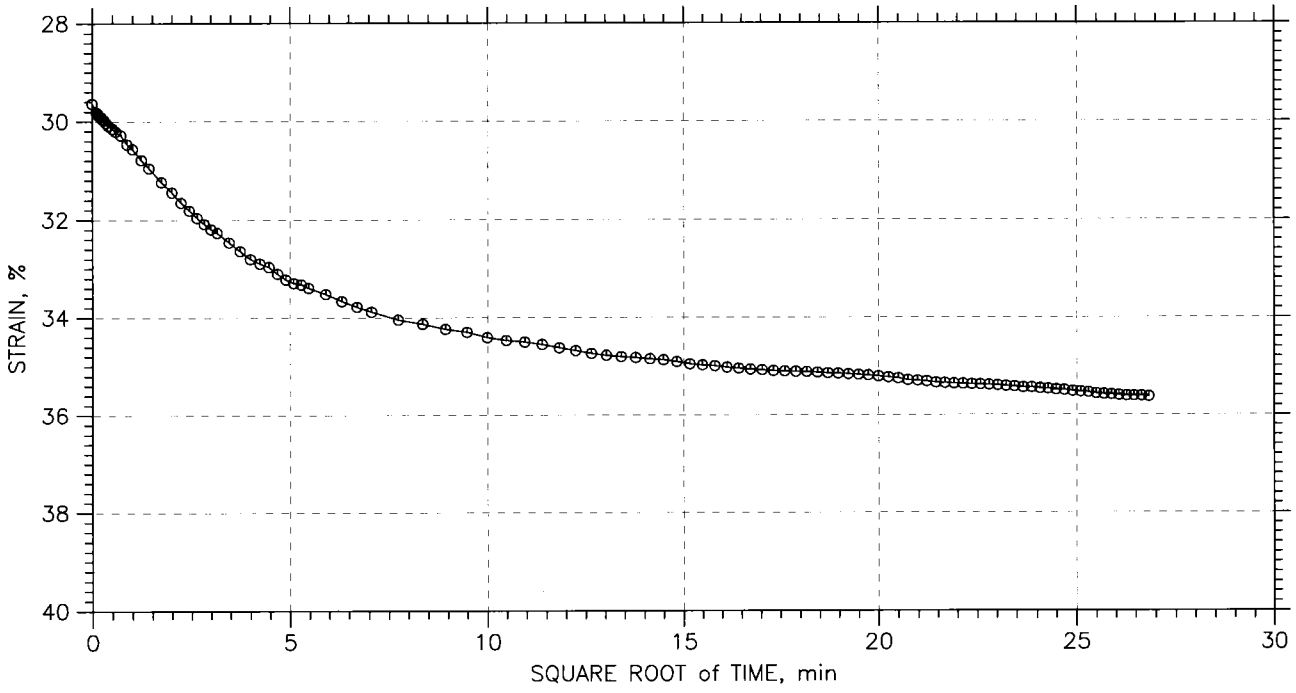
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 2560. psf





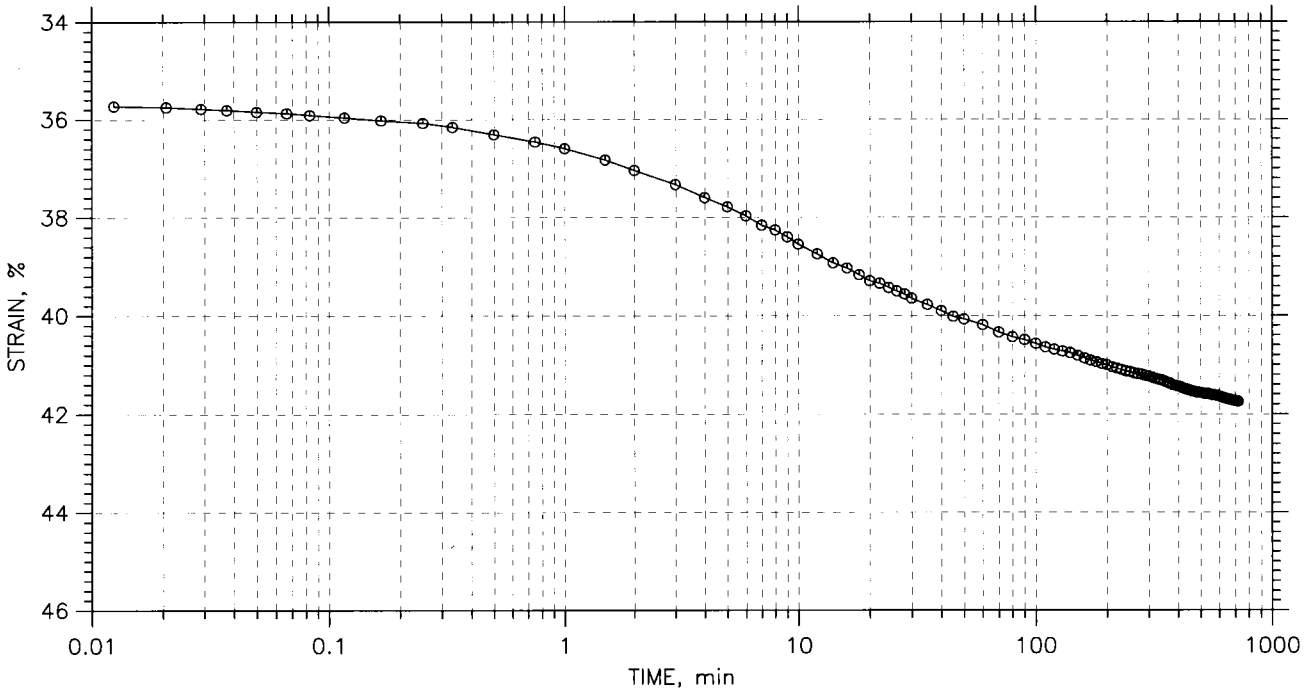
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

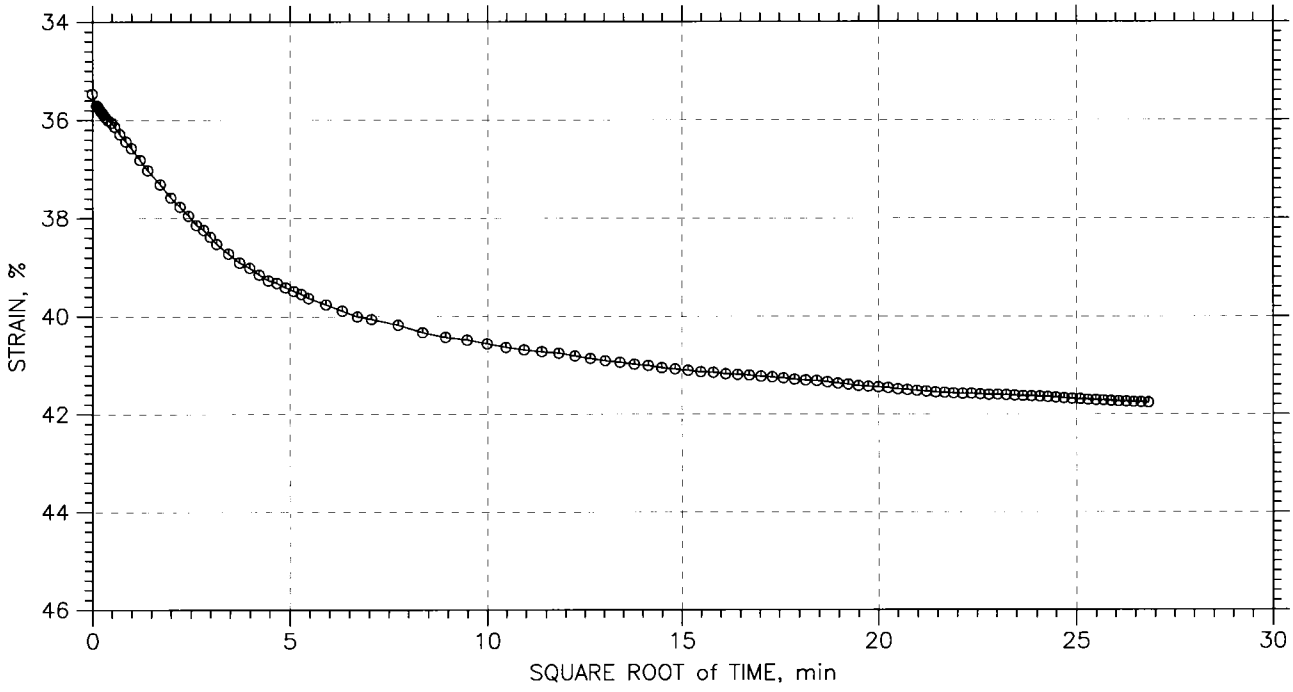
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 5120. psf





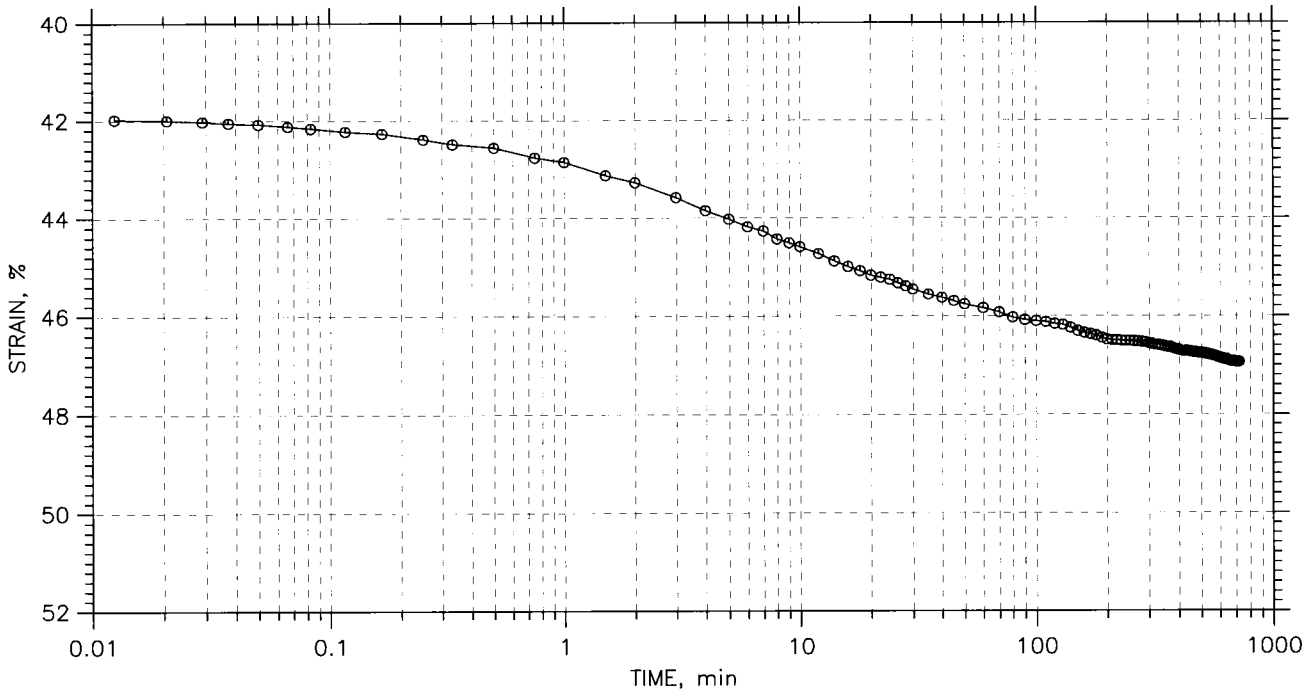
GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

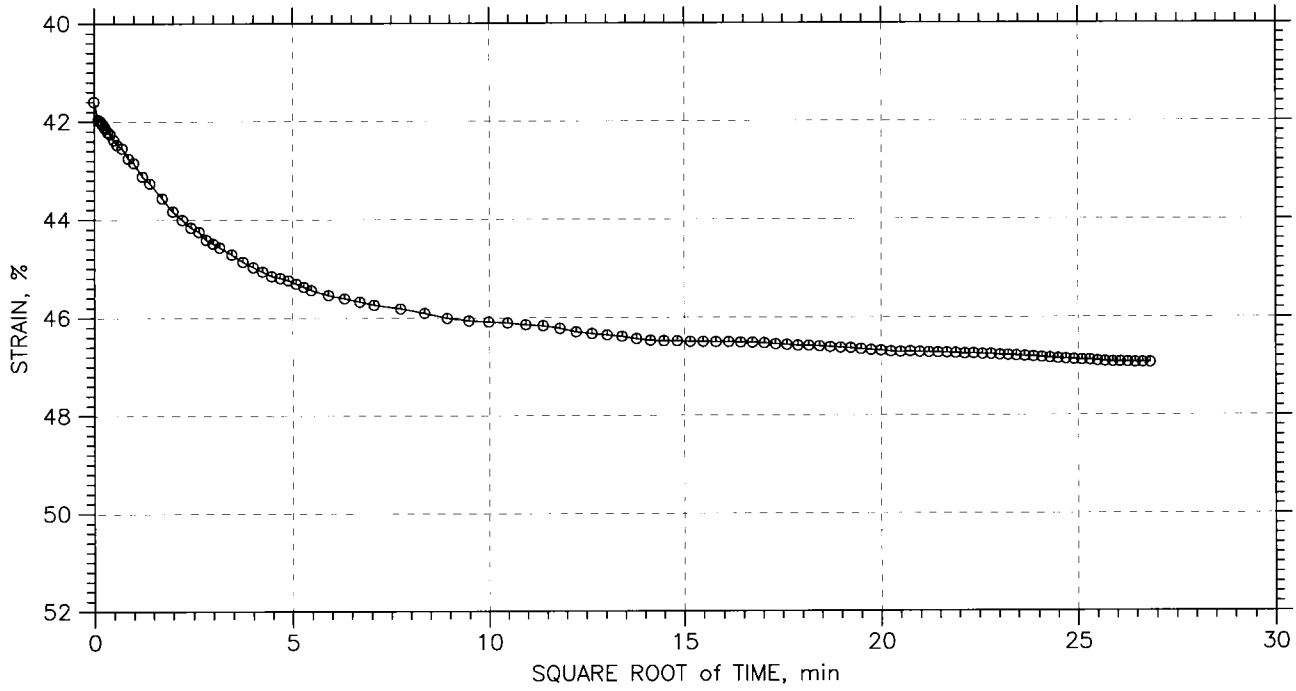
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 10240 psf





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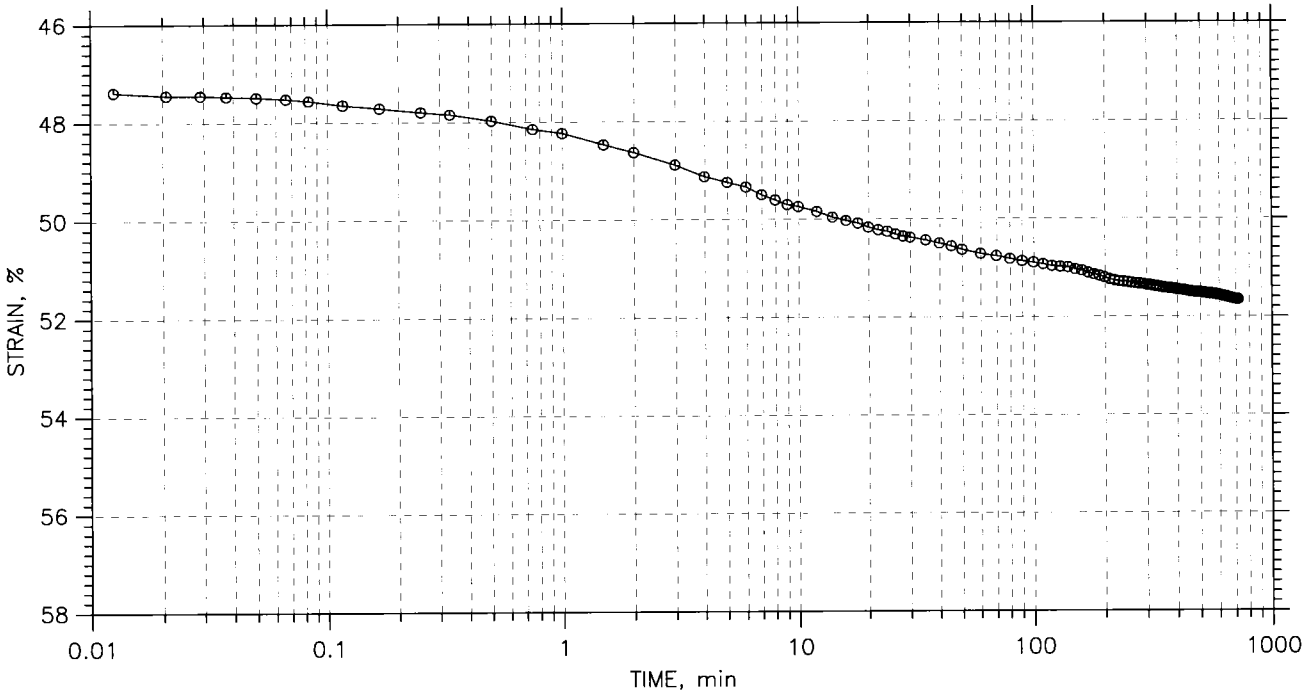
	Sample No.: 2-03	Test Date: 08/24/09	Depth: ---
	Test No.: C-7A	Sample Type: tube	Elevation: ---
	Description: Wet, dark gray silt		
	Remarks: System C		

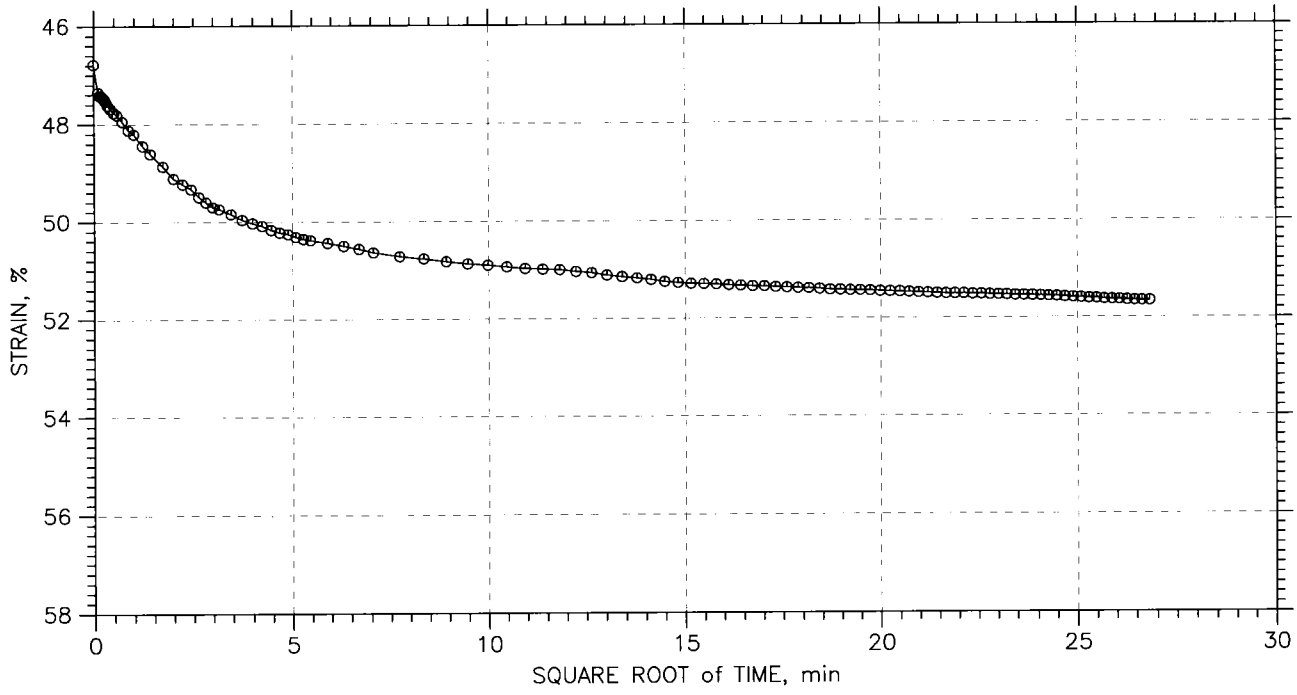
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 20480 psf





GeoTesting express a subsidiary of Geocomp Corporation	Project: MBDS	Location: Boston, MA	Project No.: GTX-9197
	Boring No.: ---	Tested By: md	Checked By: jdt
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Appendix M

Crater Modeling Tool

Introduction

This memo details the development of a screening tool to predict crater formations from the placement of Boston Harbor dredged material at the Industrial Waste Site (IWS). Boston Harbor sediments are generally composed of relatively soft newer sediment, very stiff Boston Blue Clay (BBC), and dense glacial till that ranges in size from fine sand to boulders. Knowing the potential components of the dredged material, the research focused on two specific scenarios: 1) The potential impact of individual large rocks or clay chucks striking the native sediment; and 2) The potential impact of a cloud of dredged material striking the bottom. For a given impact scenario, sediment type, and sediment volume; the tool estimates the area of impact, the forces generated during impact, and the dimensions of the resulting crater.

While there exists a body of analytical work on the subject of sediment falling through the water column, most approaches require the use of coefficients and scaling factors that must be evaluated based on empirical results. Evaluating the impact of a single large particle was straightforward from an analytical and implementation point of view, so the particle impact scenario was considered first. The following sections provide an overview of the analytical methods used to develop the tool for particle impacts, and describes how the values of empirical constants were chosen. The calculation section describes how these methods were implemented in the tool. In addition, the impact of four different sized rocks and four different chunks of clay were evaluated to determine how the impact crater size depended on the size and shape of the impacting object. The issue of a sediment cloud impacting the bottom was then considered separately.

Particle Impact Component of the Tool

Theoretical Aspect of Particle Impacts

In general the scenario of large individual rocks or clay chunks (generally called “particles”) striking the bottom is relatively simple compared to the impact of a collection of particles in a sediment cloud. The conceptual model for particle impact starts with the release of the particle at the water surface. It was assumed that the particle was initially at rest and therefore had no initial velocity.

The particle falls through the water column at a velocity until it impacts the sediment, at which point an impact crater is formed and the particle comes to rest in the crater. The actual impact event is assumed to be very fast, so that it can be considered as an impulse-type reaction.

As the particle falls through the water column, it accelerates due to gravity while the fluid drag force works to oppose the acceleration of the particle. If the water column is sufficiently deep, the fluid drag force will eventually equal the force due to gravity and the particle will reach terminal velocity. The depth at the IWS allows for the assumption that the particles will reach terminal velocity or V_t, given by the Equation 1a and 1b for both spherical and cubic particles:

$$V_t = \sqrt{\frac{4gD}{3C_{DW}}\left(\frac{\rho_s - \rho_w}{\rho_w}\right)} \quad \text{(For a sphere)} \qquad (1a)$$

$$V_t = \sqrt{\frac{2gD}{C_{DW}}\left(\frac{\rho_s - \rho_w}{\rho_w}\right)} \quad \text{(For a cube)} \qquad (1b)$$

Where:

ρ_s = Unit mass of the particle,
ρ_w = Unit mass of the water,
D = Characteristic length (diameter or edge),
C_{DW} = Drag coefficient in water,
g = Acceleration due to gravity.

The actual magnitude of terminal velocity will depend on the material type (granite versus BBC), the size of the particle, the shape of the particle, and the drag coefficient. For a cube and a sphere of the same material with an equivalent edge length or diameter, the cube will have greater volume and therefore greater mass than the sphere. However, the cube would also have a higher drag coefficient, which would increase the drag force as it fell through the water. The drag coefficient for a sphere is 0.47, while it is 1.05 for a cube with the direction of flow perpendicular to the face of the cube and is 0.8 for a cube when the flow direction is parallel to a diagonal. It was assumed that a drag coefficient of 0.9 was reasonable for a cube tumbling through the water column. The different drag coefficients dictate that for a spherical clay chunk and a cubic clay chunk of similar size (diameter similar to edge length) the spherical chunk will have a higher terminal velocity due to the lower drag coefficient. However, the volume of a cube will increase more rapidly than the volume of a sphere as the edge and diameters increase. As a result, the mass of a cubic particle will increase more rapidly with size than for a spherical particle, which dictates that the momentum and kinetic energy of the cubic particles will actually be greater than that for spherical particles.

The calculated terminal velocity (V_t) and the mass of the particle were then used to calculate the kinetic energy of the particle, which was then fed into the simplified cratering calculations developed by H.J. Melosh and R.A. Beyer, an online version of which are at (http://www.lpl.arizona.edu/tekton/crater_c.html). The Fortran code for their model is available at http://www.lpl.arizona.edu/tekton/crater.for. Their approach used π-scaling methods to estimate the physical characteristics of the resulting impact crater based on measured properties of laboratory and real impact craters. The calculation algorithms were developed by analyzing a database of impact craters to determine which factors were most critical for estimating the size and depth of the craters. The π-scaling methods then allowed the algorithms to be applied to particles with different sizes and densities. These calculations are not specific to sediment but were instead developed from measurements of impact craters in a variety of materials. However, they do provide an estimate of the crater diameter (rim to rim), crater depth (from the pre-impact sediment elevation), and the time required for crater formation.

While the kinetic energy can be calculated from Newton's Second Law, the equations used to estimate the crater diameter and depth were based on measurements of real craters to develop scaling factors. For consistency, initial work on this screening tool started with the coefficient and exponent values developed by Melosh and Beyer for impacts in saturated soil. These factors may lead to results that are more conservative than what would be observed in the field due to the mass and viscosity of the overlying water in an aquatic placement scenario.

To calculate the peak force during impact it was assumed that the impact event could be considered an impulse reaction. An impulse reaction is a very fast reaction in which a force F acts over a short time *dt* which causes a change in momentum ∆P (Equation 2).

$$\Delta P = \int_0^t F dt \tag{2}$$

If it is assumed that the mass is constant, that the deceleration curve has a sine wave shape, and the length of time *dt* for crater formation is can be obtained from the cratering model, then the peak force developed during the impact event can be calculated. The sine wave shape of the deceleration curve is an idealized form of the deceleration behavior observed during the impact of a free fall cone penetrometer in sediment (Mulukutla et al., 2011). Based on these assumptions, the peak force, the peak stress (peak force over the cross-sectional area), and the depth of influence were determined.

The actual calculations used in the particle analysis part of the tool are described below.

Particle Calculations

As discussed above, the shape of the particle dictates the energy and momentum of the particle at impact. The calculations were developed for a cubic particle since it would have a higher momentum and therefore would represent a more conservative approach. In order to calculate the impact of a particle on

the sediment bottom, certain input values must be provided. The following list summarizes the required input data.

ρ_s = Unit mass of the particle (kg/m^3)
ρ_w = Unit mass of the water (kg/m^3)
D = Characteristic length (Diameter or Edge) (m)
C_{DW} = Drag coefficient in water
g = Acceleration due to gravity (m/s^2)
ρ_{sed} = Unit Mass of target sediment (kg/m^3)

The mass of a spherical particle is then:

$$m = \rho_s D^3 \tag{3}$$

The velocity of the particle (assuming terminal velocity) is given by Equation 1b:

$$V_t = \sqrt{\frac{2gD}{C_{DW}}\left(\frac{\rho_s - \rho_w}{\rho_w}\right)} \tag{4}$$

The kinetic energy of the particle (KE) is equal to:

$$KE = \frac{1}{2} m V_t^2 \tag{5}$$

The crater diameter D_c is derived using the model by Melosh and Bayer:

$$D_c = 1.56\left(1.6\left(\frac{m}{(\rho_{sed} - \rho_w)}\right)^{0.33}\left(\frac{1.61gD}{V_t^2}\right)^{-0.22}\right) \tag{6}$$

The coefficient 1.6 and the exponent 0.22 are values taken from the Melosh and Bayer code for an impact in saturated soil. The coefficients 1.56 and 1.61 and the exponent 0.33 are also constants from the code which were used for consistency.

The depth h of the resulting crater was found using the relationship $h=D_c/5$, which is the same relationship used by Melosh and Bayer.

The time for crater creation is given by (Melosh and Bayer):

$$T_D = \left(\frac{0.8D}{V_t}\right)\left(\frac{1.61gD}{V_t^2}\right)^{-0.61} \tag{7}$$

The coefficient 0.8 and the exponent 0.61 are constants that were used by Melosh and Bayer.

The acceleration a_o can be found by assuming an impulse reaction:

$$\Delta P = \int_0^{T_D} F dt \rightarrow m V_t = m \int_0^{T_D} a_o \sin\left(\frac{\pi}{T_D} t\right) dt \tag{8a}$$

$$a_o = \frac{\pi V_t}{2 T_D} \tag{8b}$$

The peak force F_p is then just $F_p = m a_o$. The peak contact pressure σ_p is then peak force divided by the cross sectional area A of the particle.

The depth of influence was found by modeling the impact at peak load as a uniform circular load with a diameter equal to the diameter of the particle. According to Boussinesq's Theory, the vertical soil stress σ_v under the particle is simply $\sigma_v = \sigma_p A_i$ where A_i is the influence factor determined by the location at which the stress is being measured. The vertical stress was measured directly under the particle to a depth of five diameters, which corresponds to a 95% reduction in the applied stress at the surface. The depths (expressed as a ratio of depth to radius) and the influence factors are shown below in Table 1.

Table 1: Influence factors for a round uniform circular load with depth.

Depth Divided By Radius	Influence Factor
0	1
0.2	0.804
0.4	0.629
0.6	0.486
0.8	0.375
1	0.293
1.2	0.232
1.5	0.168
2	0.106
3	0.051
4	0.03
5	0.019
10	0.005

Concrete Loading as a Function of Depth

It is useful to consider these loads applied to a concrete slab to better understand the magnitudes of the stresses resulting from impact. Consider a 2 m long by 1 m wide slab of concrete simply supported at the narrow edges. Then apply the contact pressure σ_o uniformly over the slab. The pressure applied to the slab will cause it to bend, and break if the pressure is too great. The greatest stress would be at the bottom of the slab, halfway between the ends. The magnitude of the bending stress σ_b is given by

$$\sigma_b = \frac{3ql^2}{4bh^2} \tag{9}$$

where:

σ_b = the bending stress,
q = the load per unit length,
l = length of the slab,
b = width of the slab,
h = thickness of the slab.

In the impact scenario of a 1 meter particle impacting the sediment, the pressure at peak load was 35 kPa, so the load per unit length would be 35 kN/m or the pressure multiplied by the area of the slab to get the load and then divided by the length to get the load per unit length. The slab length l is 2 m, and the width b is 1 m. The flexural strength of concrete, or strength of a concrete beam in bending, is often taken to be 10% – 20% of its compressive strength. Assume that the concrete slab is similar to a sidewalk slab and made with 5000 psi concrete. In SI units, the compressive strength would be 34,500 kPa and the flexural strength would be 3,450-6,900 kPa (10%-20% of compressive strength). Rearranging the bending stress equation to solve for the thickness h gives:

$$h = \sqrt{\frac{3ql^2}{4b\sigma_b}} \quad (10)$$

Using the values given above and using the lower strength value of 3,450 kPa results in a slab thickness of 0.17 m (6.9 in) required to resist the applied load, while using the higher end strength value results in a slab thickness of 0.12 m (4.9 in). These thicknesses may seem large when comparing the strength of sediment to the strength of concrete, but also consider that the above calculation was for a concrete slab taking the full impact load. At a depth of 1 particle radius or 0.5 m, the stress has been reduced by 0.293 (see Table 1), which results in a reduction of required thickness to 0.09 m (3.7 in) using the 3,450 kPa strength value. At a depth of 2 particle radii or 1 m, the thickness reduces to 0.06 m (2.2 in).

The above exercise is not meant to show that a concrete waste container would survive a direct hit from 1 m diameter chunk of clay. It does show that sediment provides a significant buffer from particle impacts, and that containers buried in the native sediment and further covered by dredged sediment should be well protected from impacts of large particles.

Scenario Study

After completing the particle impact components of the tool, a set of impact scenarios was evaluated. The study considered how the crater diameter changed due to the shape and size of the particles. Spherical and cubic clay chunks with a diameter or edge length of 0.25, 0.5, 1 and 2 meters were considered. As discussed earlier, round chunks will have a higher terminal velocity due to their reduced drag, while a cubic chunk with a comparable edge length will have a greater mass. Both mass and velocity determine the kinetic energy at impact, which in turn dictates the crater diameter. This study quantified how changes in size and shape lead to changes in the crater diameter.

The results showed that the difference in crater diameter between similarly sized spherical and cubic particles was small over the range of sizes considered. The craters from cubic chunks were larger than the craters from spherical chunks, due to the greater kinetic energy caused by the greater mass. The impact crater diameter from a 2 m cube was 1 m greater than the crater caused by a sphere with a diameter of 2 m, an increase of 20%. Crater depths were comparable between similarly sized spheres and cubes except at the extreme end of the impact scenarios where cubic particles resulted in slightly deeper craters. Table 2 summarizes the input data and results used in the study.

Table 2: Summary of input data and resulting crater diameters for spherical and cubic clay particles of different sizes.

	Spherical Clay Particle				Cubic Clay Particle			
ρ_s (Unit Mass of the particle, kg/m^3)	1876	1876	1876	1876	1876	1876	1876	1876
ρ_w (Unit Mass of the water, kg/m^3)	1030	1030	1030	1030	1030	1030	1030	1030
D (Characteristic Length (Length or Diameter, m)	0.25	0.5	1	2	0.25	0.5	1	2
C_{DW} (Drag coefficient in water)	0.48	0.48	0.48	0.48	0.9	0.9	0.9	0.9
g (Acceleration due to gravity, m/s^2)	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
ρ_s (Unit Mass of sediment, kg/m^3)	1450	1450	1450	1450	1450	1450	1450	1450
m (Mass of particle, kg)	7	55	443	3544	13	106	846	6768
V_t (Terminal velocity, m/s)	2.4	3.3	4.7	6.7	2.1	3.0	4.2	6.0
KE (Particle kinetic energy, J)	19	310	4952	79235	30	473	7566	121062
Dsimple (Crater Diameter, m)	0.5	0.9	1.8	3.6	0.5	1.1	2.1	4.3
Depth (Crater Depth, m)	0.1	0.2	0.4	0.7	0.1	0.2	0.4	0.9

Given that the impact velocity of a particle is a function of its shape and density, and that the impact momentum of the cubic particles was always greater than for the spherical particles, the conservative approach would be to use cubic particles for design purposes. This is the approach that was implemented in the design tool. Figure 1 shows modeled crater diameter and depths for cubic particles plotted as function of the particle edge length.

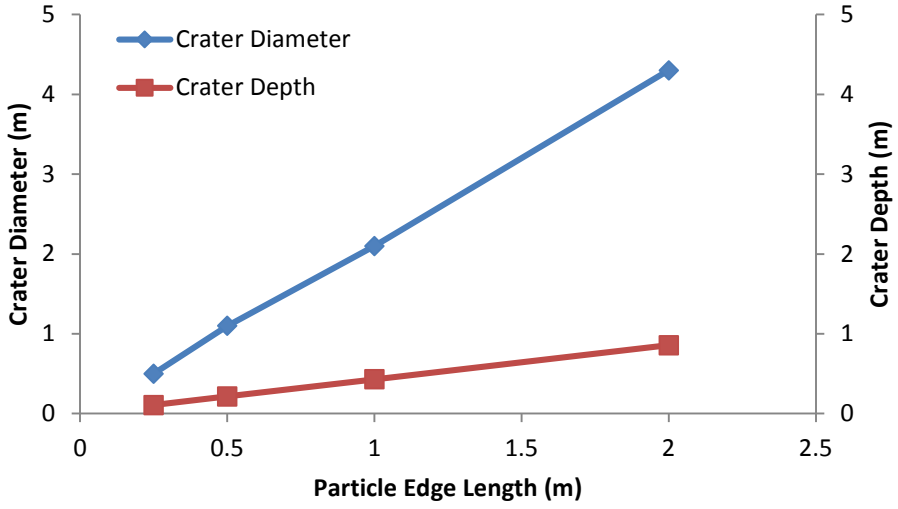

Figure 1: Predicted crater dimensions from the impact of a cubic particle at the IWS plotted as a function of the impacting particle edge length.

Sediment Cloud Impact Component of the Tool

Sediment Cloud Impacts

Describing the descent and impact of a sediment cloud is much more complex than describing the impact of a single particle because the sediment cloud involves the interaction of a large number of particles of different sizes as well as the entrainment and mixing of the surrounding fluid as the cloud falls. In general, the behavior of dredged sediment cloud depends on the particles sizes, water content, density, the size of the cloud, velocity, and whether or not the particles are cohesive. Work by Ruggaber (2000) and Gensheimer (2010) from the Massachusetts Institute of Technology specifically looked at modeling sediment clouds and how to relate real sediment properties to current models that describe cloud behavior using the entrainment coefficient (α), drag coefficient (C_D), and the added mass coefficient (k).

Conceptually, the descent of a sediment cloud is in some ways similar to the descent of a particle. When a load of dredged sediment is released into the water column the sediment "slug" has a higher density than the surround seawater and begins to sink. The sediment slug falls though the water column until it impacts the sediment. What is different about the behavior of the sediment slug compared to a particle is that the slug entrains water, so its density decreases, and the shape and volume of the slug changes due to interactions with the surrounding fluid. In general the behavior of the sediment can be defined by three distinct phases:

1. Convective Descent: The sediment load falls through the water column due to the negative buoyancy of the sediment volume.
    a. Thermal Phase - Initially the sediment volume takes on the properties of a "thermal", a term from fluid mechanics that describes how the sediment behaves as a dense fluid cloud that slows and flattens as it descends. The thermal phase is marked by the growth of eddies and a vortex ring shape. The vortex flow entrains water into the cloud, but also keeps particles circulating in the cloud so that sediment is not being lost.
    b. Dispersive Phase – As the thermal cloud continues to slow, its velocity will eventually become less than the terminal velocity of the largest particles; causing the largest particles to fall out of the cloud and descend on their own.
2. Dynamic Collapse: This phase occurs when the cloud impacts the bottom sediment, or when the buoyancy of the cloud becomes neutral. At neutral buoyancy the cloud will stop descending and will spread horizontally in the water column.
3. Passive Diffusion: The sediment particles on the bottom move due to the ambient currents.

Figure 2 illustrates the different phases of the sediment cloud descent. The convective descent and dynamic collapse phases of are the greatest interest to this effort since they determine the size and velocity of the sediment cloud at impact.

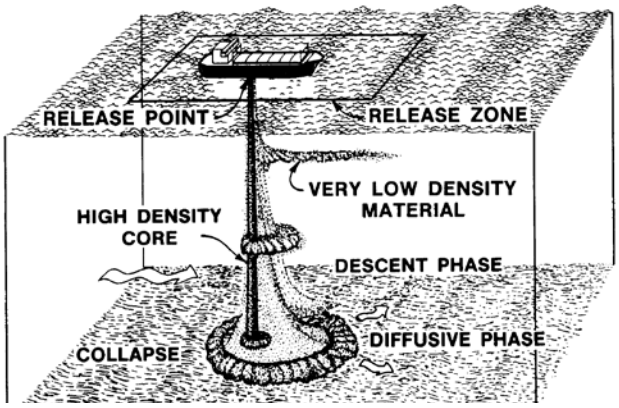

Figure 2: An illustration of the elements of dredged sediment descent. (Truitt, 1986)

The approach taken to determine the impact of the sediment cloud was similar to that of a particle. By calculating the mass and velocity of the cloud at impact, the change in momentum could be determined and adjusted for horizontal spreading, which would be used to determine the peak force.

Initially, work focused on using the basic radius relationship $r=\alpha z$ to determine the radius at impact. In this case z is the depth and α was described above. Knowing the radius would allow determination of the cloud volume, and by assuming that mass is conserved (no sediment is lost), the cloud bulk density could be determined. However, this approach did not lend itself to determining the velocity with depth or at impact. The main issue was that water is entrained into the sediment cloud, reducing the bulk density which in turn reduces the negative buoyancy force. In addition, drag also acts on the surface of the sediment volume, reducing the volume. Alternative methods all suffered from the same inherent flaw, that using empirical relationships to estimate one parameter (radius for instance) led to unrealistic values for related quantities (volume).

Instead the USACE model STFATE was used to step through the cloud descent in small increments to apply the drag force, water entrainment, and other terms to estimate the impact velocity and volume. While there may be issues with how STFATE determines mounding of dredged sediment, Ruggaber (2000) found the following when studying Boston Blue Clay:

> "Forward modeling suggests that an integral-type model, such as STFATE used with constant coefficients, performs quite well (i.e., 10% accuracy) in simulating particle cloud behavior (i.e., velocity deceleration and radial growth rate) in the "thermal" phase but over predicts cloud growth in the "circulating thermal" phase by 10-25%."

The circulating thermal phase occurs late in the descent, if at all, and is marked by a decreased rate of radial expansion. Modeling this phase would require a revised value of α to estimate the cloud. However, Ruggaber (2000) found that in general the cloud would remain in the thermal phase in depths of approximately 100 m, and as long as the fraction of large particles was relatively small. These results suggested that STFATE would be an efficient and accurate way to evaluate the descent of a sediment cloud at the IWS.

STFATE essentially steps through the convective descent phase of a dredged sediment cloud using short time increments. Once the cloud reaches the bottom, STFATE switches to the collapse phase and steps through the process of the sediment cloud impacting the bottom. STFATE assumes that the sediment cloud has the form of an ellipsoid, and that the density is uniform throughout the cloud. At the beginning of the collapse phase, STFATE provides the dimensions of the ellipsoid, the difference between the density of the cloud and the surrounding water, and the velocity of the cloud centroid. By examining the change in velocity with time, the length of the collapse phase can also be determined. Using the above data, all the required input information for the crater formation model can be determined, and the resulting crater properties can be calculated. The calculations are described below.

Cloud Calculations

The following data needed to calculate the cloud properties are taken from the STFATE output files.

L_1 = Length of Major Axis of Ellipsoid
L_2 = Length of Minor Axis of Ellipsoid
H = Height of Ellipsoid
$\Delta\rho$ = Density Difference
g = Gravitational Constant
V_c = Centroid Velocity
ρ_{sed} = Unit mass of sediment
T_c = Collapse Time
ρ_w = Unit Mass of the water

The volume of the ellipsoid (V_e) is given by Equation 11:

$$V_e = \frac{\pi}{6} L_1 L_2 H \tag{11}$$

The mass of the sediment cloud is then the bulk density of the cloud multiplied by the volume of the ellipsoid. However, STFATE does not explicitly provide the bulk density of the cloud. Instead the difference between the density of the cloud and the surrounding water is given. The cloud bulk density is then the difference in densities added to the density of water. The mass of the sediment cloud is then:

$$m = (\rho_w + \Delta\rho) V_e \tag{12}$$

The velocity at impact is already given by STFATE. The time required for collapse can be determined by examining when the collapse started, and when it stopped. The time to reach 99% reduction in the downward velocity was chosen as the end point for the collapse process. With the above information, the crater diameter D_C could be found using Equation 6, the depth could be found using the relation $h=D_c/5$, and the pressure could be found using Equation 7, similar to the particle calculations.

However, after reviewing the physics of the cloud impact, it became clear that the physical processes involved were different than those for a particle impact. In particular, the density of the cloud was less than the density of the target material, and it was deformable, as opposed to a solid particle. This led to the model under predicting the diameter and depth of the resulting crater. The model assumptions were then calibrated to the data generated from the demonstration project, changing the general scaling factors in order to address the change in the cratering process. The average diameter of individual craters from the demonstration project was 72.8 m compared to the average crater diameter from the model output of 35.7 m. The general scaling coefficient was increased to 3.4 to align the mean model output with the mean observed crater diameter.

Similarly, the depths of the demonstration project craters and the STFATE craters were compared as well. However, since the depth of the crater is critical to determining the potential for disturbance to the underlying sediment or waste containers, the average crater depth was compared to the average STFATE depth minus one standard deviation. This is a more conservative approach resulted in a scaling relationship between the crater depth and diameter of $Depth_{crater} = Diameter_{crater}/220$. When applied to the STFATE results, the craters were generally around 74 m in diameter and 0.34 m in depth. Figure 3 plots the predicted crater diameters and depths for 12 model simulations with the mean crater dimensions from the demonstration project provided as a reference.

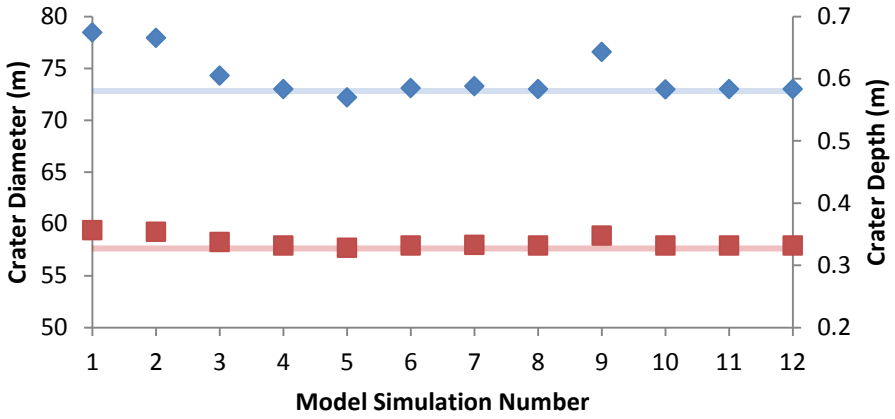

Figure 3: Predicted crater dimensions from the impact of a barge load of dredged material at the IWS. Blue symbols represent the crater diameter, red symbols represent the crater depth; mean demonstration crater dimensions provided as reference.

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